A PRE EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF IEC PACKAGE ON AWARENESS AND COPING ABILITY REGARDING LEARNING DISABILITY OF CHILDREN AMONG PRIMARY SCHOOL TEACHERS AT SELECTED SCHOOLS, THANJAVUR.

BY

REG NO: 301232102

A DISSERTATION SUBMITTED TO
THE TAMILNADU DR.M.G.R MEDICAL UNIVERSITY, CHENNAI,
IN PARTIAL FULFILLMENT OF THE REQUIREMENT
FOR THE AWARD OF THE DEGREE OF
MASTER OF SCIENCE IN NURSING,
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OCTOBER - 2014

DECLARATION

I hereby declare that the present dissertation titled, "**A pre experimental study to assess the effectiveness of IEC package on awareness and coping ability regarding learning disability of children among primary school teachers at selected schools, Thanjavur,** outcome of original research work undertaken and carried out by me under the guidance of Prof. Mrs. Vanitha Innocent Rani , M.Sc(N), PhD, Principal, Our Lady Of Health College Of Nursing and the clinical specialty guide **Ms. SARANYA, M.Sc (N).,** HOD of Mental Health Nursing department, Our Lady Of Health College Of Nursing.

I hereby declare that the material of this thesis has not found in any way, basis for the award of any degree/diploma in this University or any other University.

301232102

CERTIFICATE

CERTIFIED THAT THIS IS THE BONAFIDE WORK OF

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SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN NURSING FROM THE TAMILNADU DR.M.G.R MEDICAL UNIVERSITY, CHENNAI.

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ABSTRACT

A Pre-experimental study to assess the effectiveness of IEC package on awareness and coping ability regarding learning disability of children among primary school teachers at selected schools, Thanjavur. In this study one group pre and post test design was carried out among 60 primary school teachers. The samples were selected by convenient sampling technique and semi structured questionnaire was used to collect the data. The study findings revealed that there was a significant difference in awareness of pre test mean score 8.83 & followed by post test mean score 17.7 (paired 't' test CV=3.809 at 0.05 level) and coping ability of pre test mean score 9.5 & followed by post test mean score 15.4 (paired 't' test CV=3.841 at 0.05 level). The calculated correlation between the awareness & coping ability value r = 0.8. It indicated positive and highly significant. The overall findings of the study showed that the IEC package was significantly effective in improving the awareness and coping ability regarding learning disability among primary school teachers.

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7	IEC Package on learning disability
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LIST OF ABBREVIATIONS

S.NO	ABBREVIATIONS
1	χ^2 - Chi-square

2	SD - Standard deviation
3	N - Number of samples
4	LD - Learning disability
5	IA - Inadequate
6	MA - Moderate adequate
7	A - Adequate

CHAPTER- I

INTRODUCTION

Humans were not born to read or to write."

(Rosemary Tannock)

BACKGROUND OF THE STUDY

Oral language skills originated a hundred thousand years ago, but reading as we know came about only a few thousand years back. If the creator did not allocate a place for it in the beginning, how did the brain then acquire it? Neuroplasticity, of course, is what made it possible, within whatever cells were given for the function of language. Multiple skills are involved in learning to read the 'spoken sounds' that get mapped into the left brain as 'written symbols' (letters) and thus as words that mean something. Reading comprehension, the process of understanding automatically as we read, is the extraction of meaning from written language.

This extraction of meaning through reading is not possible in children with learning disorders, especially reading disorder. 'Listening' comprehension, on the other hand, is excellent in the LD child, though he cannot 'read' and comprehend; he can answer the teacher's question orally, but cannot write the same. Hence, the axiom that the 'LD child would be the smartest lad in the whole school if instruction were entirely oral!'.From the neural findings, there is a current consensus among researchers that the central problem in Learning Disorders reflects a core deficit in the Language system.

Similarly, attention as in Attention-Deficit Hyperactivity Disorder (ADHD) was not seen as a deficit in Learning Disorders, until recently. Today several lines

of evidence - behavioral, genetic, and neuroimaging studies - show that attention mechanisms play an active role in reading and reading comprehension. Learning disorders, therefore, are not pure syndromes.

There are children who can learn and not learn at the same time. Some students apply little or no effort to school tasks while they commit considerable time and effort to demanding, creative activities outside of school. Learning disabilities are problems that affect the brain's ability to receive process, analyze, or store information.

"Learning disabilities" is an unexplained difficulty a person of at least average intelligence has in acquiring basic academic skills. As the children with learning disability find it difficult to adjust in schools, teachers are also challenged to find ways and provide them with the very best instruction possible .If parents and teachers are equipped with adequate knowledge and appropriate skills in handling these children and also their attitude of accepting the child with learning disabilities, will help the child improve in the future.

A general practitioner in Sussex, England, published the first case of what is now known as dyslexia, a word derived from the Latin word "dys", which translates to 'difficult', and the Greek word "lexia", which translates to 'words'; it literally means, *"difficulty with words"*. Morgan wrote in the ***British Medical Journal***, about Percy F, a 14 year old, who was intelligent, bright, quick with learning games, and the intellectual equal of his peers, but fell behind, in his ability to learn how to read. **(Morgan, 1896)**

Royal College of Nursing (2010) proposed that People with learning disabilities is a diverse group and varies widely in their abilities, affecting the kind of support each person needs. The terms "mild", "moderate" and "severe or profound" learning disabilities appear to suggest distinct categories for learning

disability but in reality these do not adequately describe the range of impairments or disabilities this group may have. Someone with autism, for example, who has learning disabilities may have significant social difficulties and appear to have moderate learning difficulties, yet may be able to look after their own personal care and everyday needs independently.

The International Dyslexia Association (2010) Created the *Knowledge and Practice Standards for Teachers of Reading*. This document serves as our guide in recognizing programs that prepare teachers of reading and/or programs that specialize in preparing teachers to work with students who have reading difficulties and disabilities. One of IDA's long term goals is to inform the public regarding the knowledge base required for skilled reading instruction. Another is to define the specific teaching capabilities that should characterize any person responsible for teaching students with dyslexia and related reading difficulties and to identify programs that meet the standards.

Learning disability association of America (2009) recent research confirms that we can teach students with learning disabilities by giving two major intervention practices that produced large outcomes. One is direct instruction. The other is learning strategy instruction

Ann Siegel (2009) said learning the Language of Relationships follow a chain of **choice - beginning - deepening - ending - choice** that is never ending. The closer to the beginning of the cycle that you have problems, the harder it is for you to develop the rest of the chain. You move through the relationship chain by the use of communication, both verbal and non-verbal. Non-verbal language appears to be a good secret code that is written nowhere, known by no-one, yet understood by everyone. Teaching non-verbal language is the foundation before you can teach appropriate social skills.

Jeby Jose (2009) reported that in most of the cases, these children are branded as useless, poor performance etc. by teachers and parents. They are also given punishment. These children are not intellectual weak. They possess different skills like music, sports, art, acting, innovation, drawing, craft and driving. Many eminent people like Winston Churchill, Einstein, Isaac Newton, Thomas Alva Edison and popular Hollywood actor tom cruise were dyslexia during childhood. If these children are not identified and remedied, we will be guilty of losing eminent people. Many times because of the punishment given by the parent teachers, such children use their skills in a negative way becoming criminals and antisocial elements.

Nalanda institution report (2009) has highlighted that in India during the last 2 decades or so, there has been increasing awareness and identification of children with learning disability. In India around 13- 14% of all school children suffer from learning disability.

National Joint Committee on Learning Disabilities (NJCLD) (2011) believes it is essential that educators be prepared to meet the needs of all students, including students with learning disabilities who have unique needs.

Help the child and identify both internal and external sources of support for better coping. And, do the same for yourself. This can be critical for developing a healthy approach to emotional challenges—which, as you know, won't disappear with adulthood!

NEED FOR THE STUDY

At present, in India, LD is considered the prerogative of a few in the big cities. Even Directors of State Education are known to express doubts at the existence of any such disability. Unfortunately, the confounding factors of English as a foreign language and lack of proper education and exposure whilst aggravating the academic difficulties for the children, also play a major part in masking the processing problems and hence make LD an exclusive entity. Teachers attribute the learning difficulties to a "language problem", not realizing that LD too is a language based disorder.

Before a specialized evaluation of a student is conducted, pre-referral discussions by teachers regarding the nature of the problem, and what possible modifications to instructions in the classroom might be made are important. Something else that seems to make a real difference is the practice of scaffolding. Start out with heavily teacher-mediated instruction - explicit instruction - then as students begin to acquire the skill, moving down the continuum to more student-mediated instruction.

World Health Organization (2011) had declared that as 1 in 5 children in the world have handicap, it is a 'serious obstacle to a child's development'. The childhood chronic illness and disabilities have been estimated to 10%.

- The incidence of learning disabilities has increased by more than 300% in the last 30 years.
- Differences by 'Gender' shows that, boys are more likely than girls to be identified as having a learning disability.

- Prevalence of reading disability is conservatively estimated to range between 4% and 10% in the general, school-aged population, although rates as high as 17% have been reported.

- Prevalence of mathematics disability alone is estimated at approximately 1 in 5 children with a learning disability, with an estimated prevalence of 1% in the general school-age population.

- The prevalence of writing disability approximately 6% of school-aged children.

- Thus the importance of nurses becomes vital in safe guarding and promoting the mental health of children and early identification of deviations from normal.

Philip J (2010) stated his experience at Cochin, with over five thousand children were assessed for poor school performance (PSP) on a hierarchical multidisciplinary model, where it has given us the strength to posit a 'spectrum-construct' of developmental disorders. An unusually high degree of co-existence of all these developmental disorders together, along with conditions such as ADHD, obsessive/obsessive spectrum disorder, as well as a pattern of presentation that is increasingly showing a stereotype encouraged us to approach these disorders as a 'mixed-bag' initially, and now as possibly the 'unitary-bag'.

Moqasale VV.et.al.,(2012) did a study to measure the prevalence of specific learning disabilities (SpLDs) such as dyslexia, dysgraphia and dyscalculia among primary school children in a South Indian city. A cross-sectional multi-staged stratified randomized cluster sampling study was conducted among children aged 8-11 years from third and fourth standard. A six level screening approach that commenced with identification of scholastic backwardness followed by stepwise exclusion of impaired vision and hearing, chronic medical conditions and

subnormal intelligence was carried out among these children. In the final step, the remaining children were subjected to specific tests for reading, comprehension, writing and mathematical calculation. The prevalence of specific learning disabilities was 15.17% in sampled children, whereas 12.5%, 11.2% and 10.5% had dysgraphia, dyslexia and dyscalculia respectively.

Malhotra S. et.al., (2009) conducted an epidemiological research methodology and in the development of instruments has been significant. Their recent study on 'incidence of childhood psychiatric disorders in India' is a longitudinal work, taking off from their well-known 2002 prevalence study. These studies have differentially diagnosed learning disorders.

Shalev, Ruth S. et.al., (2007) stated that knowledge of the prevalence of learning disabilities in general, and dyscalculia in particular, has major clinical, educational, and public health ramifications. Determining the prevalence of dyscalculia can also aid in assessing the efficacy of educational programs and instructional methods. Furthermore, in many countries, educational interventions are mandated by law, with consequent budgetary implications. Therefore, generating reliable data on the prevalence of learning disabilities is far from being a theoretical issue. Rather, it is a necessity for those agencies responsible for providing medical services and special educational interventions. It is imperative to identify medical and environmental conditions that may masquerade as learning disabilities or exacerbate the difficulties of a child who is considered academically weak who does not have a learning disability.

Priti Arun et.al., (2013) stated that several studies have been conducted in India to determine the prevalence of learning disabilities in school children which has been reported to be 3-10 per cent among students population. The present study was conducted to find out prevalence of specific developmental disorder of scholastic skills in students of classes VII to XII and to find out feasibility of

screening tool in Chandigarh, India. A cross-sectional study on school students was carried out in two phases. The students were drawn from classes VII to XII from 10 schools of Chandigarh, India. Details of academic performance of all the students was taken, subjectively from class teachers and objectively from the marks obtained in the last academic session. In phase I, 2402 students were assessed. In phase II, 108 students were randomly selected for evaluation for assessing sensitivity and specificity of screening proforma for teachers. A total of 124 students from phase I and all students in phase II were assessed in detail. Tests of intelligence (Malin's Intelligence Scale for Indian Children and Standard Progressive Matrices), and NIMHANS Index for specific learning disability (SLD) battery were administered. A total of 38 students were found to be having specific developmental disorder of scholastic skills in phase I that gave a prevalence of 1.58 per cent. Majority had mixed type of errors on SLD battery. There were more boys diagnosed with specific learning disability. Teacher's screening instrument had high sensitivity (90.385) and specificity (94.68).

Bir Singh Chavan (2010) states that in a review of Indian studies on prevalence of learning disability, prevalence of various types of deficits of scholastic skills was reported to be 3-10 per cent among students population. In this review, studies had screened students for dyscalculia, dyslexia and different type of learning disabilities in the States of Karnataka, Kerala and Tamil Nadu. In another study from rural India, prevalence of specific learning disability was reported to be 13 per cent in primary school children. In a study from northern region, one per cent of children attending an outpatient clinic of a tertiary hospital were found to be having specific learning disability. This cross-sectional study was carried out during April 2008 - May 2009 on school students of Chandigarh after approval of the research protocol from the ethics committee of the Government Medical College and Hospital, Chandigarh. The sample size was calculated based on reported prevalence of 10 per cent, 95% confidence interval

and relative error of 15 per cent, and it came out to be 1600. Considering a non-response rate of 20 per cent, the final sample size was calculated as 1920.

Jhon P (2010) proposed the articles that include Learning and Developmental Disorders have been gathered from the Indian Journal of Psychiatry (IJP) archives, and are broadly discussed. Learning disorders (LD) are not pure syndromes. They are developmental disorders and are multi-dimensional in nature. Research areas in Child Psychiatry in India remain largely unexplored, especially developmental disorders. The potential for research is mind boggling. Original research must keep pace with work in the west, and must be of a high order. Results must be published in our national journal and not abroad, in order to bestow prestige to our journal, so the world can sit up and take notice.

Gina Kemp, M.A et.al, (2013) stated that everyone - learning disability or not - has their own unique learning style. Some people learn best by seeing or reading, others by listening, and still others by doing. You can help a child with a learning disability by identifying his or her primary learning style. Is your child a visual learner, an auditory learner, or a kinesthetic learner? Once you've figured out how he or she learns best, you can take steps to make sure that type of learning is reinforced in the classroom and during home study

The recent Hindi movie *Taare Zameen Par* (" *Stars on the Earth*") (2011) has sensitively and accurately depicted the plight of an 8-year-old boy battling SpLD. The commercial success and critical acclaim of this movie has created a tremendous impact and will help sensitize viewers about this hidden disability. However, a lot needs to be done to ensure that every child with SpLD is detected and receives remedial education in our country.

Ministry of Human Resource Development report (2008) stated that government of India since 2001 has launched the Sarva Shiksha Abhiyan

('Education for All' Movement) which is a comprehensive and integrated flagship program to attain universal elementary education in the country in a mission mode. Launched in partnership with the state governments, the program aims to provide useful and relevant education to all children, including children with disabilities.

Ministry of Social Justice and Empowerment (2008) Report that SpLD should be recognized as a disability by the union government of India. For this advocacy groups will have to convince the policy makers to amend the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 which is guided by the philosophy of promoting equality and participation of persons with disabilities and eliminating discriminations of all kinds.

Keeping in view of the above, needs of educating the primary school teachers is very important while handling the students in primary schools and it will help to improve their coping ability and reduce the stress. So the researcher has taken the study to evaluate the effectiveness of IEC package on awareness and coping ability regarding learning disability of children among primary school teachers.

STATEMENT OF THE PROBLEM

Effectiveness of IEC package on awareness and coping ability regarding Learning Disability of children among primary school teachers at selected schools, Thanjavur.

OBJECTIVES OF THE STUDY

- To assess the pre and post test level of awareness and coping ability regarding learning disability of children among primary school teachers.
- To assess the effectiveness of IEC package on awareness and coping ability regarding learning disability of children among primary school teachers.
- To correlate the post test scores of awareness and coping ability regarding learning disability of children among primary school teachers.
- To associate the pre test level of awareness and coping ability regarding learning disability of children among primary school teachers with their selected demographic variables.

RESEARCH HYPOTHESIS

All the hypotheses are tested at the significant level of 0.05

H1: There is a significant difference between pre and post test scores of awareness and coping ability regarding learning disability of children among primary school teachers.

H2: There is a significant correlation between the post test scores of awareness and coping ability regarding learning disability of children among primary school teachers**.**

H3: There is a significant association between pre test level of awareness and coping ability regarding learning disability of children among primary school teachers and their selected demographic variables**.**

OPERATIONAL DEFINITIONS

EFFECTIVENESS

In this study it refers to the extent to which the awareness and coping ability is improved regarding learning disability of children among primary school teachers after the administration of IEC package.

IEC (Information, Education and Communication)

- **INFORMATION**

It refers to Enhances awareness and coping ability regarding Learning disability of children to primary school teachers with the help of fliers

- **EDUCATION**

It refers to systematically planned and organized teaching activity with specific objectives to impart preferred awareness and coping ability regarding learning disability of children among primary school teachers with the help of flash cards**.**

- **COMMUNICATION**

It refers to a two way process of clarifying the doubts of primary school teachers regarding awareness and coping ability regarding learning disability of children**.**

- **IEC Package**

In this study it refers to a package adopted for teaching the primary school teachers with the help of fliers and flash cards

AWARENESS

In this study it refers to the gaining of knowledge regarding learning disability of children among primary school teachers.

COPING ABILITY

In this study it refers to the extent to which the primary school teachers help the children with learning disability to overcome the academic underachievement.

LEARNING DISABILITY

In this study it refers to the child's academic underachievement in reading, written expression, or mathematics in comparison with the chronological age, overall intellectual ability and age appropriate education.

PRIMARY SCHOOL TEACHERS

In this study it refers to the teachers who are taking classes for 1^{st} to 5^{th} standard students at selected schools.

ASSUMPTIONS

- Primary school teachers may not have adequate knowledge and coping ability regarding learning disability of children.
- An IEC package on learning disability of children may improve the knowledge and coping ability of primary school teachers**.**

LIMITATION

- The study is limited to primary school teachers at selected schools, Thanjavur.
- The study is limited to a period of 6 weeks.

PROJECTED OUTCOME

- The study will help to improve the knowledge and coping ability regarding learning disabilities of children among primary school teachers.
- The study will help the primary school teachers to identify the learning disability of children among primary school children at the earliest.

CHAPTERIZATION

CHAPTER - I

This chapter deals with the introduction, need for the study and statement of the problem, objectives, research hypothesis, operational definitions, assumptions, limitation, projected outcome and chapterization

CHAPTER - II

This chapter deals with theoretical and empirical information and conceptual framework.

CHAPTER -III

This chapter explains the research methodology adopted for the study. It includes the research approach, research design, variables, setting, population, sample, sample size, sampling technique, criteria for sample selection, data collection tool, validity and reliability of the tool, report of pilot study, method of data collection, scoring and interpretation, plan for data analysis and protection of human subjects.

CHAPTER- IV

This chapter deals with the analysis and interpretation of the collected data from 60 primary school teachers with reference to their awareness and coping ability regarding learning disability of children.

CHAPTER - V

This chapter deals with the discussion of the study with appropriate literature review, statistical analysis and the findings of the study based on the study objectives and hypothesis

CHAPTER- IV

This chapter deals with summary and conclusion, implications and recommendation.

CHAPTER-II

REVIEW OF LITERATURE

Literature review is a key step in a research process. The main goal of literature is to develop a strong knowledge base to carry out research activities in the education and clinical practice. Review of literature is a broad systemic and critical collection and evaluation of important scholarly published literature as well as unpublished materials. The review serves as an essential background for any research. An extensive review of literature was done to get a broader view of the problems.

This chapter consists of two parts.

PART- I: LITERATURE REVIEW

It is further divided into two sections.

SECTION 1: Theoretical Literature

Theoretical information related to learning disability conditions, treatment, and method of teaching to primary school student.

SECTION 2: Empirical Literature

Part I: Literature related to incidence of learning disability

Part II: Literature related to intervention of learning disability of primary school children

Part III: Literature related to coping ability among the primary school teacher

Part IV: Literature related to IEC package of learning disability

PART – II: CONCEPTUAL FRAME WORK

SECTION- 1

THEORETICAL LITERATURE

INTRODUCTION:

Learning disabilities or learning disorder is an umbrella term for a wide variety of learning disabilities. A learning disability is not a problem with intelligence or motivation. Kids with learning disabilities aren't lazy or dumb. In fact most children are just as smart as everyone else. Their brains are simply wired differently. This difference affects how they receive and process information.

DEFINITION:

Children and adult with learning disabilities see, hear, and understand things differently. This can lead to trouble with learning new information skills, and putting them to use.

What is a learning disability?

Having trouble in processing information, Organizing information, applying information.

A learning disability is a condition that produces a gap between someone's ability and his or her performance.

INCIDENCE:

- In India the incidence of learning disabilities has increased by more than 300% in the last 30 years
- In India the prevalence rate of learning disability is 3 % to 10 % of school age population

- Prevalence of reading disability is conservatively estimated to range between 4% and 10% in the general, school-aged population, although rates as high as 17% have been reported
- Prevalence of mathematics disability alone is estimated at approximately 1 in 5 children with a learning disability, with an estimated prevalence of 1% in the general school-age population
- The prevalence of writing disability approximately 6% of school-aged children
- The majority of schoolchildren who receive special education services have deficits in reading and dyslexia is the most common cause.
- Differences by 'Gender' shows that boys are more likely than girls to be identified as having a learning disability.

CAUSES OR PRESUMED CAUSES OF LEARNING DISABILITIES:

- NO real causes
- Might be caused by:
    - Hereditary
    - Teratogenic
    - Medical
    - Environmental

TYPES OF LEARNING DISABILITY:

The most common types of learning disabilities involve problems with reading, writing, math, reasoning, listening and speaking.

1. Learning disabilities in reading (dyslexia)

Signs of reading difficulty including problems with;

- Letter and word recognition
- Understanding words and ideas

- Reading speed and fluency
- General vocabulary skill

2. **Learning disabilities in maths (dyscalculia)**

- Problem doing math problem
- Struggle with memorization and organization of number, operation sign and number ‘’facts’’.
- Understanding time, using money

3. **Learning disabilities in writing (dysgraphia)**

Symptoms of a writing language learning disability revolve around the act of writing. They include problems with;

- neatness and consistency of writing
- accurately copying letter and words
- spelling consistency
- writing organization and coherence

4. **other types**

- **learning disabilities in motor skills (dyspraxia)**

  Motor difficulty refers to problem with movement and coordination whether it is fine motor skills (cutting, writing) or gross motor skills (running, jumping).

- **Learning disabilities in language (aphasia\ dysphasia**)

Language and communication LD involves the ability to understand or produce spoken language.

- **Auditory processing disorder**

  Difficulty in hearing difference between sounds and problem with reading, comprehension, language.

- **Visual processing disorder**

  Difficulty in interpreting visual information and problem with reading, maths, maps, charts, symbols and picture.

5. **Other disorder make learning difficult**

- **ADHD (Attention Deficit Hyperactivity Disorder)**

  Children with ADHD often have problems, staying focused, following instruction, stay organized, and completing homework.

- **Autism**

  Children with autism spectrum disorder may have trouble in communicating, reading body language, learning basic skills, making friends, and making eye contact.

PRESCHOOL SIGNS AND SYMPTOMS OF LEARNING DISABILITIES:

- Problem pronouncing words
- Trouble in finding the right word / Difficulty rhyming
- Trouble in learning the alphabet, number, colors, shapes, days of the week etc.
- Difficulty in following direction or learning routines

- Difficulty in controlling crayons, pencils, and scissors or coloring within the lines.
- Trouble with buttons, zippers, snaps, learning to tie shoes.

PATHO PHYSIOLOGY:

In normal learning conditions, the brain has the ability to reorganize itself by forming new neural connections. These new connection enable facilities skills like reading and writing that were difficult using the old connection. Science has made great strides in understanding the inner working of the brain, and one important discovery that brings new hope for learning disabilities and disorder is called neuroplasticity. **Neuroplasticity refers to the brain's natural, lifelong ability to change.** Throughout life, the brain is able to form new connections and generate new brain cells in response to experience and learning.

DIAGNOSIS AND TESTING FOR LEARNING DISABILITY:

Diagnosing a learning disability is a process. It involves testing, history taking & observation by a trained specialist. Finding a reputable referral is important.

Types of specialists who may be able to test or diagnose LD include;

- Clinical Psychologist
- School Psychologist
- Child Psychiatrist
- Educational Psychologist
- Developmental Psychologists
- Neuropsychologist
- Occupational Therapist
- Speech and Language Therapist

TREATMENT:

- Learn the specific type of your child's learning disability; read and learn about your child's type of learning disability.
- Research treatments, services, and new theories; this can help you advocate for child at school and pursue treatment at home.
- Pursue treatment and services at home; you can pursue these options on your own at home or with a therapist or tutor.
- Nurture your child's strengths ; pay attention to your child's interest and passions.
- Emphasize healthy lifestyle habits;
    - Exercise- is antidote to stress and frustration. Encourage your child with LD to get outside move and play.
    - Diet - full of whole grains, fruits, vegetables, and lean protein will help boost mental focus.
    - Sleep- kids need more sleep than adult. Preschooler need 11 to 13 hour per night, middle school children need 10 to 11 hrs, teens and preteens need from 8 **1/2** to 10hrs

SUCCESSFUL STRATEGIES FOR TEACHING STUDENTS WITH LEARNING DISABILITIES:

Lee Swanson (1999) and his colleagues found two major intervention practices that produced large outcomes. One is direct instruction. The other is learning strategy instruction.

The steps of these strategies are,

a. Break learning into small steps

b. Administer probes

c. Supply regular quality feedback

d. Use diagrams, graphics and pictures to augment we are saying in words

e. Provide ample independent, well-designed, intensive practice

f. Model instructional practices that they wanted students to follow

g. Provide prompts of strategies to use

h. Engage students in process type questions like “How is that strategy working? Where else might you apply it?”

Success for the student with learning disabilities requires a focus on individual achievement, individual progress, and individual learning. This requires specific, directed, individualized, intensive remedial instruction of students who are struggling.

Reading Instruction: Tips for Teachers

Create Appreciation of the Written Word

- Share stories with children and invite them to explore a story's magic.
- Share informational texts and invite children to wonder about the new ideas presented.
- Take every opportunity to point out the ways in which reading is essential to the communications of everyday life (e.g., on labels, instructions, and signs).

Develop Awareness of Printed Language and the Writing System

- Make sure students know how books are organized. They should be taught the basics about books which they are read from left to right and top to bottom, that print may be accompanied by pictures or graphics, that the pages are numbered.

- Read to children from books with easy-to-read large print. Use stories that have predictable words in the text.

Teach the Alphabet

- A strong predictor of the ease with which a child learns to read is his or her familiarity with letters of the alphabet.
- It is important to go beyond knowing the names of letters.
- Help them notice the letters in the print that surrounds them and that you share with them every day.
- Engage the students in activities that will help them learn to recognize letters visually.

Develop the Students' Phonological Awareness

- In listening and speaking, we pay attention to the meaning of language rather than to its sound.
- Model and demonstrate how to break short sentences into individual words. For example, use the sentence "Frogs eat bugs," and demonstrate with chips, card or other manipulative how the sentence is made up of three words and how the order of the words matter.
- Once children are comfortable in playing games with words, syllables, and rhymes, move onto phonemic awareness.

Develop Phonemic Awareness

- Phonemic awareness refers to an understanding that words and syllables are comprised of a sequence of elementary speech sounds.
- In teaching phonemic awareness, the focus of all activities should be on the sounds of words, not on letters or spellings.
- Use strategies that make phonemes prominent in children's attention and perception. For example, model specific sounds, such as /s/ in the word sat, and ask children to produce each sound in isolation.

- Begin with simple words and simple challenges, e.g., listen for initial /s/ in sat, sit, sip, and sad . . . or for long /e/ in me, see, bee . . . .
- Teach students to identify the separate phonemes within words, e.g., what is the first sound of soup? What is the last sound of kiss?

Teach the Relation of Sounds and Letters

- Students should learn the letters of the alphabet and discriminate each letter from the other.
- When presenting each letter, model its corresponding sound and have children produce the sound themselves.

- At first, teach and work with only a few letter-sound correspondences that have high utility in many words (e.g., /m/ in man, mad, him, and ham). Postpone teaching less frequently occurring letters.

Teach Children How to Sound Out Words

- After students have mastered a few letter-sound correspondences, teach them to decode words or sound them out. Begin with small, familiar words.
- Model sounding out the word, blending the sounds together and saying the word.
- Give children stories containing words that reflect the letter-sound patterns.

Teach Children to Spell Words

- Teach children to spell words by sounding their letters one by one.

- Begin with short words children can sound out, e.g., cap, bat, and sit instead of cape, bait or sight.

- Begin with simple words that do not contain consonant blends, e.g., ham and pan instead of slam and plan.

- Encourage students to use spelling knowledge and strategies regularly in their own writing.

Help Children Develop Fluent, Reflective Reading

- Help children learn to read fluently by requiring them to read new stories and reread old stories every day.
- Help children extend their experience with the words, language, and ideas in books by interactively reading harder texts with them and to them every day.
- Point out how titles and headings tell what a book is about.
- Help students identify the main ideas presented in the text, as well as the supporting detail.eg: Graphics help to reveal main ideas.

SUCCESSFUL HOMEWORK STRATEGIES FOR TEACHERS:

Teachers play a vital role in the selection, assignment, and use of homework.

Teachers will maximize the effectiveness of homework if they will:

- Communicate to parents in the first meeting or correspondence of the year appropriate areas in which parental involvement can help reinforce their children's learning rates, performance, and confidence.

- Compare the amount of time the students required to complete homework assignments with an anticipated completion time, and modify assignments as needed.
- Learn student feelings about homework assignments by having them circle smiling, Frowning or neutral faces on the corner of homework papers to indicate their feelings too easy, too difficult, or just right. Then modify assignments as needed.
- Plan with other teachers at your school in terms of length and frequency of homework assignments, adoption of similar homework practices, such as a standard style for headings.
- Assign activities such as age-appropriate games (made in class) or other activities that will be fun.
- Assign activities which are relevant to the child outside of the classroom. Assign homework that enriches, reinforces, or supplements classroom instruction.
- Randomly reward homework completion "Everyone finished their assignments last week, so you may have five minutes extra recess today."
- Use a homework planner. Just as adults use calendars or other aids to schedule activities, students can benefit from structured notes. They can be taught to enter assignments, note due dates, and indicate completion.
- Communicate with parents regarding the amount of homework you plan to assign, and approximate time required for completion.
- Suggest activities that parents can do with their children so enhance learning.
- Review homework promptly and provide students with feedback and additional instruction as appropriate.
- Explain the purpose of homework assignments and ensure that the assignment is understood.
- Homework assigned to students with disabilities may result in greater

Acquisition of Independent study skills and increase time spent on academic tasks.

SECTION –2

EMPIRICAL LITERATURE

PART I: LITERATURE RELATED TO INCIDENCE OF LEARNING DISABILITY

Lisa M D, Archibald et.al., (2013) conducted an epidemiological approach to study the learning profiles of a large school age sample in language, reading, and math. These latter four profiles characterized 70% of children with some evidence of a learning disability. Among them the low math only group did not show these phonological deficits. These findings may suggest different etiologies for language-based deficits in language, reading, and math, reading-related impairments in reading and math, and isolated math disabilities.

Rajagopal rao kodali and Chandrasekar (2012) conducted community based cross sectional study to identified disabled children using a

pre tested questionnaire by interview technique in 8 villages under area of rural medical college, loni. Overall results prevalence rate of children with disabilities was 2.25%, hearing & speech impairment prevalence rate was more 1.34%, followed by locomotors 0.32%, visual impairments 0.23%, MR 0.19% and miscellaneous 0.17%.

Cooper S.A. et.al., (2009) conducted a longitudinal cohort study among all adults with learning disability – within a geographically defined area of Scotland; the participation rate was 1023 (65.5%). After 2 years, the cohort retention was 651 adults. The point prevalence of *Diagnostic Criteria for Psychiatric Disorders for Use with Adults with Learning Disabilities/Mental Retardation* (DC-LD) aggressive behavior was 9.8% (95% confidence interval = 8.0–11.8%), 2-year incidence was 1.8%, and 2-year remission rate from all types of aggressive behavior meeting DC-LD criteria was 27.7%.

Shoba Srinath et.al., (2009) conducted an epidemiological study to determine the prevalence rates of child and adolescent psychiatric disorders was initiated as a two-centre (Bangalore and Lucknow) study by the ICMR. In Bangalore, 2064 children aged 0-16 yr, were selected by stratified random sampling from urban middle-class, urban slum and rural areas. The ICD-10 DCR criteria were used to reach a penta-axial diagnosis. The results indicated a prevalence rate of 12.5 % among children aged 0-16 yr. There were no significant differences among prevalence rates in urban middle class, slum and rural areas.

PART II: LITERATURE RELATED TO INTERVENTION OF LEARNING DISABILITY OF PRIMARY SCHOOL CHILDREN

Jeremy K. fox. et.al., (2012) conducted a study to evaluate a parent–child indicated preventive intervention for preschoolers with mild to moderate anxiety symptoms. Sixteen children (ages 3–5) and at least one of their parents participated in Strengthening Early Emotional Development (SEED), a new 10-week intervention with concurrent groups for parents and children. Outcome measures included clinician-rated and parent-rated assessments of anxiety symptoms, as well as measures of emotion knowledge, parent anxiety, and parental attitudes about children's anxiety.

Jia Huang (2010) Conducted a study to investigate the effectiveness of *Solve It!* instruction on students' knowledge of math problem-solving strategies. *Solve It!* is a cognitive strategy intervention designed to improve the math problem solving of middle school students with learning disabilities (LD). Participants included seventh- and eighth-grade students with LD (n = 77) and average-achieving students (n = 77). We examined treatment effects of the intervention, as well as differential effects of treatment across ability levels, on students' knowledge of problem-solving strategies using the Math Problem-Solving Assessment. Results showed that students across ability levels who received *Solve It!* instruction reported using significantly more strategies than students in the comparison group.

Nancy J. Nelson-Walker et.al., (2010) conducted a study to examines the efficacy of a multi tiered systemic reading intervention for increasing the intensity and quality of explicit literacy instruction that teachers provide in first-grade classrooms. Schools (j = 16) were randomly assigned to the treatment or comparison condition. In both conditions, teachers (i = 42) provided 90 min of Tier I reading instruction to first-grade students (n = 883). At-risk treatment students (n = 240) also received an additional 30 min of Tier II supplemental reading intervention that was highly aligned with Tier I

instruction. Results indicate positive effects of the Tier I intervention on the quality of explicit instruction and the frequency and accuracy of group practice opportunities provided to students.

Bowyer-crane C. et.al., (2009) conducted a study to compare the efficacy of two school based intervention programme (phonology with reading (P+R) and oral language (OL) for children with poor oral language at school entry. In this study 960 children were participated. At the end of 20 week intervention programme, children in the P+R group showed an advantage over the OL group on literacy and phonological measures, while children in OL group showed an advantage over the P+R group on measurement of vocabulary and grammatical skills and these gains were maintained over 5 month period.

Jennifer L. Krawec (2009) conducted a study to examine differences in math problem solving among students with learning disabilities (LD, *n* = 25), low-achieving students (LA, *n* = 30), and average-achieving students (AA, *n* = 29). Paraphrasing, visual representation, and problem-solving accuracy were measured in eighth grade students using a researcher-modified version of the *Mathematical Processing Instrument*. Results indicated that both students with LD and LA students struggled with processing but that students with LD were significantly weaker than their LA peers in paraphrasing relevant information.

Marshall H. Raskind,et al., (2009), wrote this article in order to provide an overview of assistive technology as it relates to postsecondary students with learning disabilities by (a) briefly tracing the development of assistive technology service for postsecondary students with learning disabilities; (b) identifying basic models of assistive technology service delivery and specific services; (c) providing a description of specific assistive

technologies; (d) reviewing research on the effectiveness of assistive technology with postsecondary students with learning disabilities, with a focus on the authors' 3-year federally funded study .

PART III: LITERATURE RELATED TO COPING ABILITY AMONG THE PRIMARY SCHOOL TEACHER

Barkmann C. et.al., (2012) conducted an evaluative study, a cohort of 2 rd and 3 rd grade students from a variety of Hamburg primary school by giving Mar Burger Rechtscreib Training (MRT). The study result was the changes in writing performance were mainly associated with school class level; improvements in reading ability were dependent on initial writing performance.

Julia Gallegos et.al., (2012) conducted a study to compare severity and risk status for anxiety and depression with coping skills among 130 Mexican school children with learning disabilities (LD) and 130 school children without LD. This research is the first to explore the emotional difficulties of Mexican children with LD. Children completed the Spanish version of the *Spence Children's Anxiety Scale* and *Children's Depression Inventory,* and the *Cuestionario de Afrontamiento* (*Coping Skills Questionnaire*). Results indicated that a higher percentage of children with LD were at risk for anxiety (22.3% vs. 11.5%) and depression (32% vs. 18%). No statistically significant differences were found for coping skills.

Antoniazzi D. et.al., (2011) conducted a study among 15 teachers by using children communication checklist on children in their I st year of school and ratings were compared with result of screening using clinical examination of language fundamental screening test. Teacher rating showed poor

sensitivity and specificity in identifying children whose oral language skills require further investigation.

Bishop D V. et.al., (2010) conducted a study to measure the effectiveness of parent and teacher rating communication skills in identifying heritable language impairment. The communication checklist was completed by parent and teacher of 6 yr old twin recruited from a general population sample. This study shows that there are strong genetic influences on both structural and pragmatic language impairment and these can detect using a simple checklist completed by parent or teacher.

Graungaard A.H. et.al., (2009) conducted a longitudinal study to investigate parents' reactions towards child's disability; the data was collected by in-depth interview technique to 16 parents of disabled children with age group of 1 to 27 months. The overall study result reveals the Parents needs in relation to communication were identified as equality in co-operation with doctors, an empathic professional approach, and the child being seen with possibilities despite his or her disabilities.

PART IV: LITERATURE RELATED TO IEC PACKAGE OF LEARNING DISABILITY

Sunil Karande And Rohini Venkataraman (2013), conducted a study to analyze the impact of "untreated" co-occurring ADHD on the "self-perceived" health-related quality of life of children with "newly diagnosed" specific learning disability. It was Cross-sectional questionnaire-based study in a learning disability clinic situated in a medical college. From February 2008 to December 2008, 136 consecutive children newly diagnosed as having "SpLD with co-occurring ADHD (SpLD/ADHD)" or "SpLD only" were enrolled. The DISABKIDS chronic generic module (DCGM-37-S (V31))

instrument was used to measure their HRQoL. HRQoL of “SpLD/ADHD” children was significantly better in limitation facet (mean difference: 8.20; 95% confidence interval (CI): 1.75-15.29; *P*=0.024). Although not statistically significant, the HRQoL of “SpLD/ADHD” children was better in independence, emotion, social inclusion and social exclusion facets; and in total score.

Mary H. Bluechardt, et al., (2012) stated that, Learning disability is characterized by a discrepancy between achievement and assessed intellectual ability. Children with this problem commonly show impaired motor proficiency, as assessed by such instruments as the Bruininks-Oseretsky Test of motor proficiency. It has been hypothesized that poor motor performance and/or poor social skills lead to exclusion from games, creating a vicious cycle of decreasing participation, decreasing competence, a deterioration of self-worth and increasing social maladjustment. The main argument for delivering social skills training through a physical activity programme lies not in a unique impact upon learning disability, but rather in terms of the other well-established long term health benefits of exercise

Philip John (2010), state that, Learning disorders (LD) are not pure syndromes. They are Developmental disorders and are multi-dimensional in nature. Research areas in Child Psychiatry in India remain largely unexplored, especially developmental disorders. The potential for research is mind boggling. Original research must keep pace with work in the west, and must be of a high order. Results must be published in our national journal and not abroad, in order to bestow prestige to our journal, so the world can sit up and take notice.

Rao, et al., (2010), said attitudes toward disabilities as a topic is widely researched when it comes to published studies concerned with disability

issues. 'Attitudinal barriers' is recognized widely as an impediment to success of persons with disabilities. However, this also happens to be the least researched variable in a fourth section discusses various variables that influence attitudes of faculty towards studies done with faculty and students with disabilities in higher education. This article presents review of literature on faculty attitudes towards persons with disabilities in four different parts: attitudes as a construct, views on attitudes towards disabilities, measurement of attitude towards disabilities, and studies done at colleges and universities with faculty.

PART- II

CONCEPTUAL FRAMEWORK

A conceptual framework is a basic structure that consists of certain abstract block which represents the observational, the experimental and analytical/synthetically aspects of a process or system being conceived. The interconnection of these blocks completes the framework for certain expected outcomes. A conceptual framework is used in research to outline possible course of action or to present a preferred approach to an idea or thought.

The conceptual framework setup for this study was the modified model of wiedenbach's helping art of clinical nursing theory (1964). Ernestine Wiedenbach proposed a prescriptive theory of nursing which is described as a

conceiving of a desired situation and the ways to attain it. Prescriptive theory directs action towards an explicit goal. It consist of three factors; central purpose, prescription and realities. A nurse develops a prescription based on a central purpose and implements it according to the realities of the situation.

A. Central purpose in the model refers to what the nurse wants to accomplish. It is the overall goal towards which a nurse strives; it transcends the immediate intent of the assignment or task by specifically directing activities towards the patient's goal.

B. Prescription refers to the plan for a patient. It specifies the nature of the action that will fulfill the nurse's central purpose and rational for action.

C. Realities refer to the physical, physiological, emotional and spiritual factors that come into play in a situation involving nurse's action. The five realities identified by Wiedenbach are agent, recipient, goal, means and framework, where the agent is the practicing nurse, recipient is one who receive a nurse's action, the goal is the nurse's desired outcome, the means are the activities and devices used by the nurse to achieve the goal, and the frame work is the facilities in which nursing is practiced.

Wiedenbach's views nursing practice as an art based on goal directed care. Her vision of nursing practice closely parallels the assessment, implementation, and evaluation steps of the nursing process.

According to wiedenbach's nursing practice consists of:

- Identifying a patient's need for help.
- Ministering the needed help and

- Validating that the need is met.

The investigator felt that Wiedenbach's helping art of clinical nursing theory provides an appropriate theoretical basis for the study of effectiveness of IEC package regarding learning disability of children among primary school teacher as Wiedenbach 's theory implies the nurse's importance in meeting the patient needs.

The central purpose of the study is to improve the awareness and coping ability regarding learning disability of children among primary school teacher. The investigator plans the prescription to meet the central purpose by means of IEC package.

The realities identified in the study are:

- Agent – investigator
- Recipient – primary school teacher handling with learning disability children
- Goal – improve their awareness & coping ability regarding learning disability of children
- Means – IEC package
- Framework – selected primary schools in Thanjavur.

With a goal to improve the awareness and coping ability regarding learning disability of children among primary school teacher, the investigator as an agent conducted a study to assess the effectiveness of IEC package among primary school teacher.

CONCEPTUAL FRAME W

CENTRAL PURPOSE

CHAPTER - III

RESEARCH METHODOLOGY

Research methodology is a way to systematically solve the research problem. Methodological studies are concerned with the development of testing and evaluation of research instruments and methods.

This chapter deals with research approach, research design, settings, populations, sample, sample size, sampling technique, criteria for sample selection, data collection tool, validity & reliability, report of pilot study, method of data collection, scoring and interpretation, plan for data analysis and protection of human subject.

RESEARCH APPROACH

The research approach used for this study is evaluative approach. The researcher aimed at assessing Effectiveness of IEC package on awareness and coping ability regarding Learning Disability of children among primary school teachers at selected schools, Thanjavur.

RESEARCH DESIGN

The researcher adopted a pre – experimental (one group pretest – post test) design.

O_1	**X**	**O_2**

Key: O_1 - Pre test

X - Intervention (IEC package regarding learning disability)

O_2 - Post test

VARIABLES

INDEPENDENT VARIABLE

- IEC package regarding learning disability

DEPENDENT VARIABLE

- Awareness and coping ability regarding Learning disability of children

EXTRANEOUS VARIABLE

- Age of the teacher, gender, formal teacher training, year of experience, frequency of in-service training, marital status, income per month and residential distance from school

RESEARCH SETTING

The study was conducted among primary school teachers at selected primary schools such as St.Peter Nursery & Primary School, Annai Janakiammal Nursery & Primary School, St.Blacke Primary School, St.Luke Nursery & Primary School and P.U.E School at Thanjavur district. The strength of teachers is approximately 7 -15 each primary school.

POPULATION

The population comprised of the primary school teachers who took classes for 1st to 5th standard students at selected schools, Thanjavur.

SAMPLE

The samples consisted of selected primary school teachers, who took classes for primary school students, who fulfilled the inclusion criteria.

SAMPLE SIZE

The sample size was 60 primary school teachers who fulfilled the inclusion criteria.

SAMPLING TECHNIQUE

Non probability-Convenient sampling technique was adopted for the study.

CRITERIA FOR SAMPLE SELECTION

INCLUSION CRITERIA

- Primary school teachers who were willing to participate in this study
- The primary school teachers whose age is above 20 years

EXCLUSION CRITERIA

- Teachers who are taking higher secondary classes were excluded in this study
- Teacher who were below the age of 20 yrs.

DATA COLLECTION TOOL

The tool consisted of 3 parts,

Part 1: Demographic variables.

Part 2: It consists of semi structured questionnaire to assess the awareness regarding learning disability of children among primary school teachers.

Part 3: It consists of semi structured questionnaire to assess the coping ability regarding learning disability of children among primary School teachers.

IEC Package:

- This Package related to learning disability of children was given by the investigator with the help of flash cards, LCD, charts & other visual Aids.

VALIDITY AND RELIABILITY OF THE TOOL

Validity of the tool was confirmed based on review of literature, and with consultation and guidance from experts**.** The tool was validated by the experts in the department and by experts from other institutions. The tool was submitted to four nursing scholars and two psychiatrists and their suggestions were incorporated.

The reliability of the tool was assessed using test-retest method by using descriptive and inferential statistics. The statistical analysis revealed the significant results. So the main study was preceded.

REPORT OF PILOT STUDY

The pilot study was conducted to assess the feasibility and practicability of the study and also to determine the major flaws in the design used. It also helped to determine the plan of data analysis.

Prior permission was obtained from Aathi Thravidar Welfare Government primary School, Manojipatti, Thanjavur. The pilot study was conducted from 20/3 /14 to 25 /3 /14. Permission was obtained from the primary schools head masters/ head miss. Informed consent was obtained from the subjects. Six primary school teachers who fulfilled the inclusion criteria were selected as sample using non probability convenient sampling technique. The investigator conducted the Pre-test by using semi structured questionnaire to assess the awareness and coping ability regarding learning disability of children which include demographic

data by using self administering questionnaire among primary school teachers. Each section had 20 objective type of questionnaire. Followed by pre test, IEC Package related to learning disability of children was given to the primary school teachers by using LCD and flash cards. After 5 days of interval, the post test was done by using the same tool. The result showed that there is a significant relationship between pre and post test level of awareness and coping ability regarding learning disability of children among primary school teacher. The tool was found feasible, effective and no other practical difficulties were identified. The investigator plan for the statistical analysis for the final study was decided. The experience of the pilot study assured the investigators confidence to proceed with final study.

METHOD OF DATA COLLECTION

The investigator had collected data within four weeks with effect from 1/4/14 to 30/4/14. Ethical clearance was obtained from institution authorities. Permission was obtained from the 6 primary schools Head Masters/ Head mistresses. 60 primary school teacher who fulfilled the inclusion criteria were selected as sample by using non probability convenient sampling technique. Informed consent was obtained from subjects. The investigator collected the demographic data of the primary school teacher related with awareness and coping ability by using self administering questionnaires. Approximately 15 minutes was spent to get data from primary school teachers and from the records. Then the investigator conducted the Pre-Test by using semi structured questionnaire to assess the awareness and coping ability regarding learning disability of children. Followed by pre test, IEC Package related to learning disability of children was given to the primary school teachers by using LCD, flash cards. The package was given as 2 session. Each session took for 1 hour. In between 2 sessions 15- 20

minutes break was given for primary school teachers. After 2 weeks of interval, the post test was done by using the same tool.

SCORING AND INTERPRETATION

Part I- The total score of multiple choice item on awareness was 20. Each item was given one mark for correct answer and zero mark for wrong answer.

- < 50% - inadequate awareness and coping ability
- 51– 75% - moderate adequate awareness and coping ability
- >76% - adequate awareness and coping ability

Part II- The total score of multiple choice item on coping ability was 20. Each item was given one mark for correct answer. Zero mark for wrong answer.

- < 50% - inadequate awareness and coping ability
- 51– 75% - moderate adequate awareness and coping ability
- >76% - adequate awareness and coping ability

PLAN FOR DATA ANALYSIS

Analysis of data was done by descriptive and inferential statistics.

DESCRIPTIVE STATISTICS

- Frequency and percentage distribution were used to determine the distribution of demographic variable among primary school teachers regarding learning disability of children.

- Frequency and percentage distribution, mean and standard deviation were used to assess the level of awareness among primary school teachers regarding learning disability of children.

- Frequency and percentage distribution, mean and standard deviation were used to assess the level of coping ability among primary school teachers regarding learning disability of children.

- Correlate pre and post test level of awareness and coping ability among primary school teachers regarding learning disability of children.

INFERENTIAL STATISTICS

- Paired‘t’ test was used to compare the pre and post test level of awareness among primary school teacher regarding learning disability of children.

- Paired‘t’ test was used to compare the pre and post test level of coping ability among primary school teachers regarding learning disability of children.

- Chi-square test used to analyze the association of demographic variable with pre test level of awareness and coping ability among primary school teachers regarding learning disability of children.

PROTECTION OF HUMAN SUBJECTS

Ethical clearance was obtained from institution authorities. Permission was obtained from the primary schools head masters/ head mistress. Informed consent obtained from subject. Confidentiality and anonymity was guarded. Scientific objectivity of the study was maintained with honesty and impartiality.

Fig 2.1 Schematic Representation of Research Methodology

CHAPTER –IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of the data from the selected samples of 60 primary school teachers at selected schools, Thanjavur. Reference to with their awareness and coping ability regarding learning disability of children to evaluate the effectiveness of IEC package.

ORGANIZATION OF DATA

The data collected were grouped and analyzed using descriptive & inferential statistical method. The study findings are presented in five sections according to the objectives.

Section – 1

Frequency and Percentage Distribution of Demographic Variables of Primary School Teacher.

Section – 2

Assessment of pre-test and post-test level of awareness and coping ability regarding learning disability of children among primary school teacher in pre-test & post-test.

Section – 3

Assessment of the effectiveness of IEC package on awareness and coping ability of the subjects regarding learning disability of children among primary school teachers.

Section – 4

Correlate the post test scores of awareness and coping ability regarding learning disability of children among primary school teachers.

Section – 5

Association between pre test level of awareness and coping ability regarding learning disability of children with their selected demographic variables.

PRESENTATION OF DATA

SECTION – 1

ANALYSIS OF DISTRIBUTION OF DEMOGRAPHIC VARIABLES OF PRIMARY SCHOOL TEACHERS

Table 4.1: Frequency and Percentage Distribution of Demographic Variables of Primary School Teachers. N=60

S.NO	DEMOGRAPHIC VARIABLES		FREQUENCY (N)	PERCENTAGE (%)
1.	**Age of the teacher**	a) 21- 25 Years	17	28%
		b) 26- 30 Years	31	52%
		c) >30 years	12	20%
2.	**Gender of the teacher**	a) Male	12	20%
		b) Female	48	80%
3.	**Formal training in teaching**	a) D.T Ed	25	42%
		b) B.Ed	20	50%
		c) Any other degree	5	8%
4.	**Years of the teaching experience**	a) < 5 years	12	20%
		b) 6- 10 years	26	43%
		c) 11- 15 years	18	30%
		d) > 16years	4	7%
5.	**Frequency of in service training**	a) One time	20	33%
		b) Two time	10	17%
		c) > 3 time	20	33%
		d) None	10	17%
6.	**Marital status**	a) Married	33	55%
		b) Single	24	40%
		c) Divorced	3	5%
		d) Separated	0	0
7.	**Type of school**	a) Private	28	47%
		b) State govt	20	33%
		c) Govt Aided	12	20%
		d) Matriculation	0	0
8.	**Income per month**	a) < 10,000	38	64%
		b) 10,000-15,000	14	23%
		c) > 15,000	8	13%
9.	**Residency Distance from school**	**a)** Walk able distance	39	65%
		b) 1 hour travel	15	25%
		c) > 1 hour travel	6	10%

The table 4.1 represents the frequency and percentage distribution of demographic variables of primary school teachers

Above mentioned table shows the distribution of demographic variable related to awareness and coping ability among the primary school teachers.

The data indicated that maximum of 31 (52%) primary school teachers were in age group 26-30 yrs, 17 (28%) of primary school teachers were in age group between 21 -25 yrs, 12 (20%) primary school teachers were in age group >30 yrs.

Considering the gender among primary school teachers, there were 48 (80%) female primary school teachers and remaining 12 (20%) male primary school teachers.

Considering the formal teacher training among the primary school teachers, in that 25 (42%) of them had finished D.T.Ed, 20 (50%) had finished B.Ed and remaining 5 (8%) had done other degree courses.

Considering years of the teaching experience among the primary school teachers, maximum 26 (43%) of them had 6 -10 yrs experience. 18 (30%) of teachers had 11-15 yrs experience, 12 (20%) had got < 5 yrs experience and remaining 4 (7%) had >15 yrs experience in primary school.

Considering the frequency of in-service training among primary school teachers, in that 20 (33%) of primary school teacher had equally attended the in-service training for one time and >3 times, 10 (17%) of them had attended for 2 times and remaining 10 (17%) had not attended any in-service training regarding learning disability.

Considering the marital status among primary school teachers, 33 (55%) were married, 24 (40%) were single and remaining 3 (5%) of them were divorcee. None of them were belonged to the category of separated.

Regarding the type of schools among primary school teachers, 28 (47%) were working in private schools, 20 (33%) of them were working in state government schools and remaining 12 (20%) were working in government aided schools. None of them were working in Matriculation schools.

Regarding income of primary school teachers per month, in those 38 (64%) had an income less than Rs.10, 000 per month, 14 (23%) had Rs.10, 000 –15,000 per month and remaining 8 (13%) samples had an income more than Rs.15, 000 per month.

Considering the distance between the residency and the school among primary school teachers, 39 (65%) lived within able to walk distance from school, 15 (25%) lived in one hour travel from that school, remaining 6 (10%) lived in more than one hour travel from school.

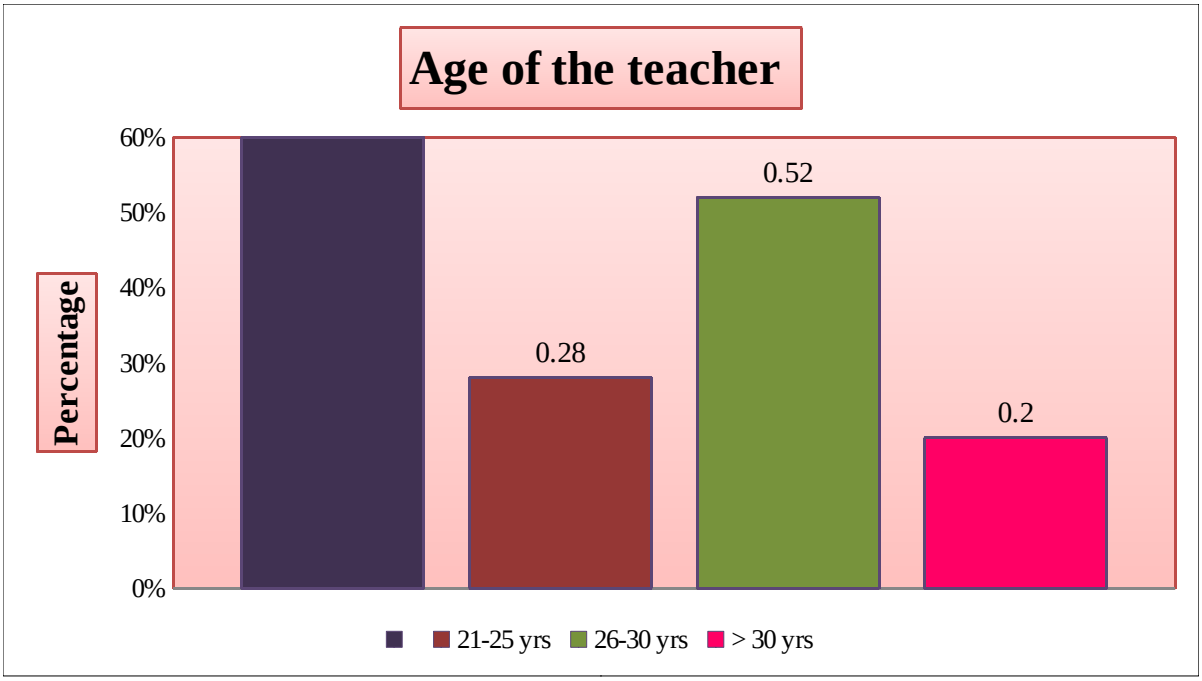

Fig 4.1: P**ercentage distribution of age of the primary school teachers**

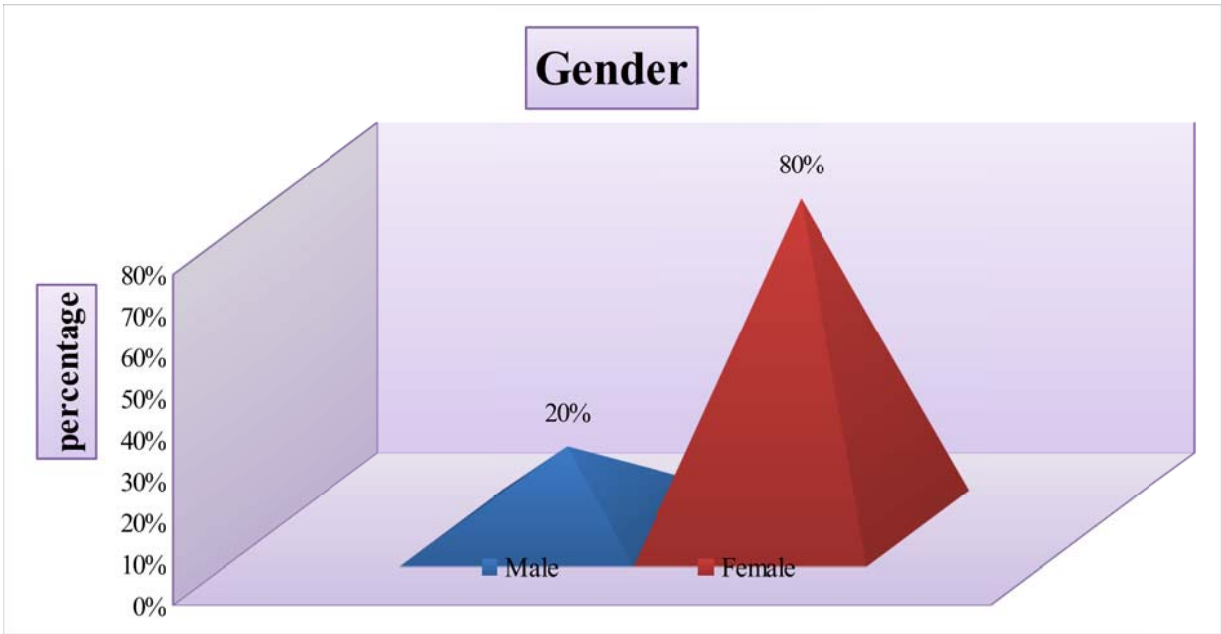

Fig 4.2: Percentage distribution of gender of the primary school teachers

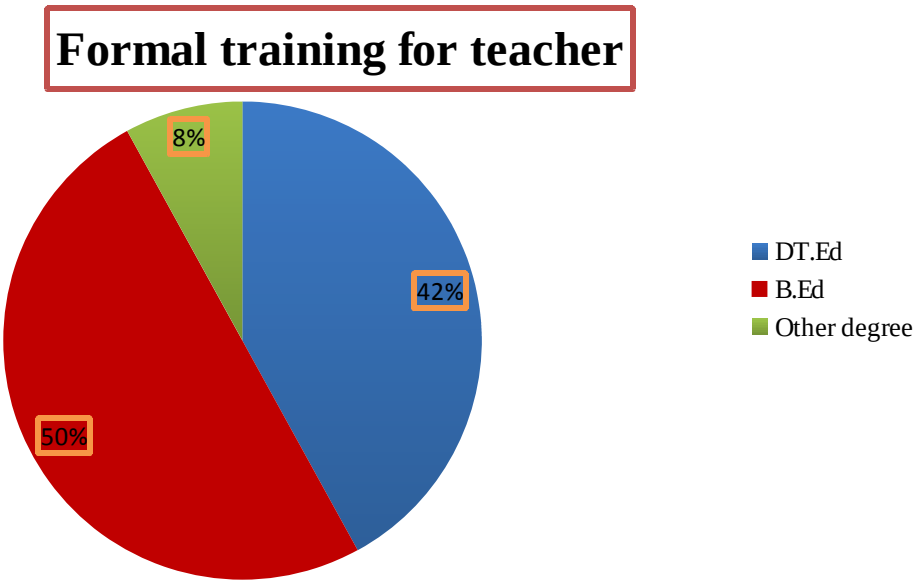

Fig 4.3: Percentage distribution of formal teacher training of the primary school teacher

Fig 4.4: Percentage distribution of year of the teaching experience of the primary school teachers

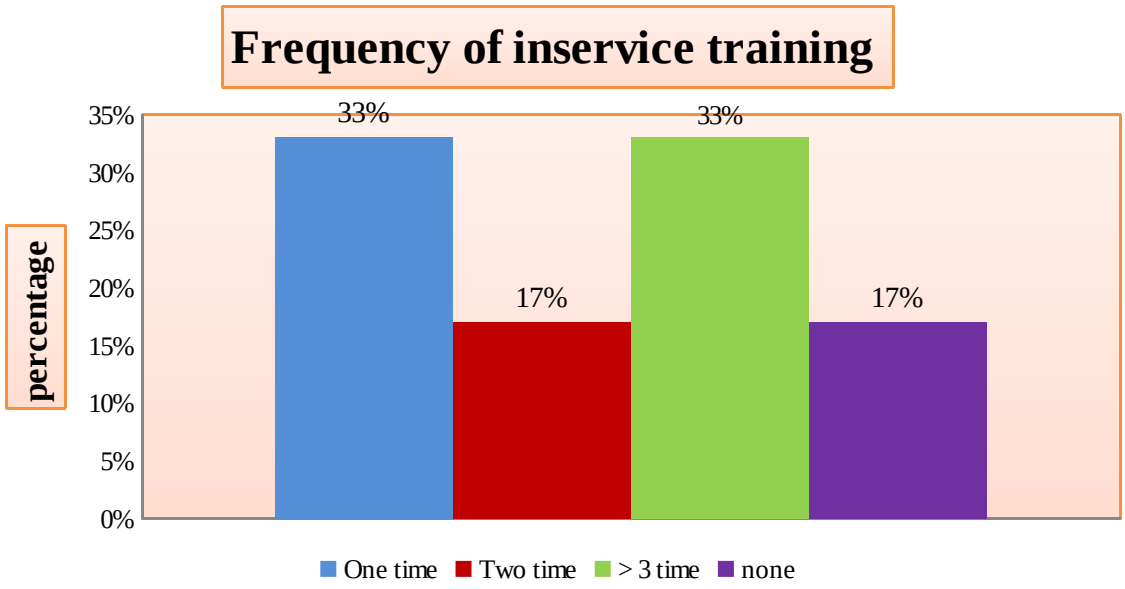

Fig 4.5: Percentage distribution of frequency of in-service training of the primary school teachers

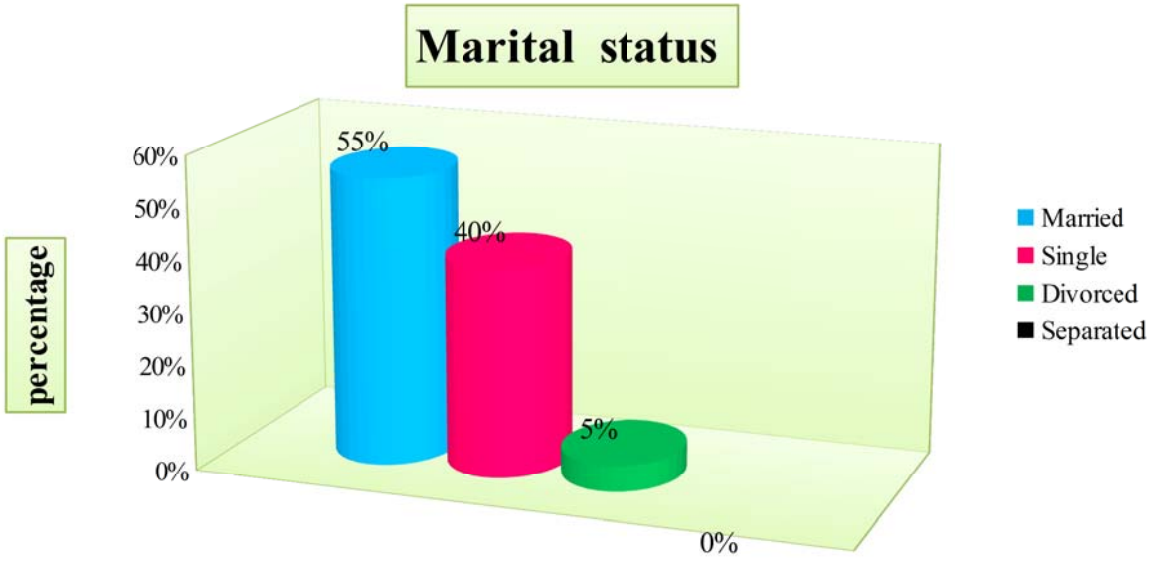

Fig 4.6: Percentage distribution of marital status among primary school teachers

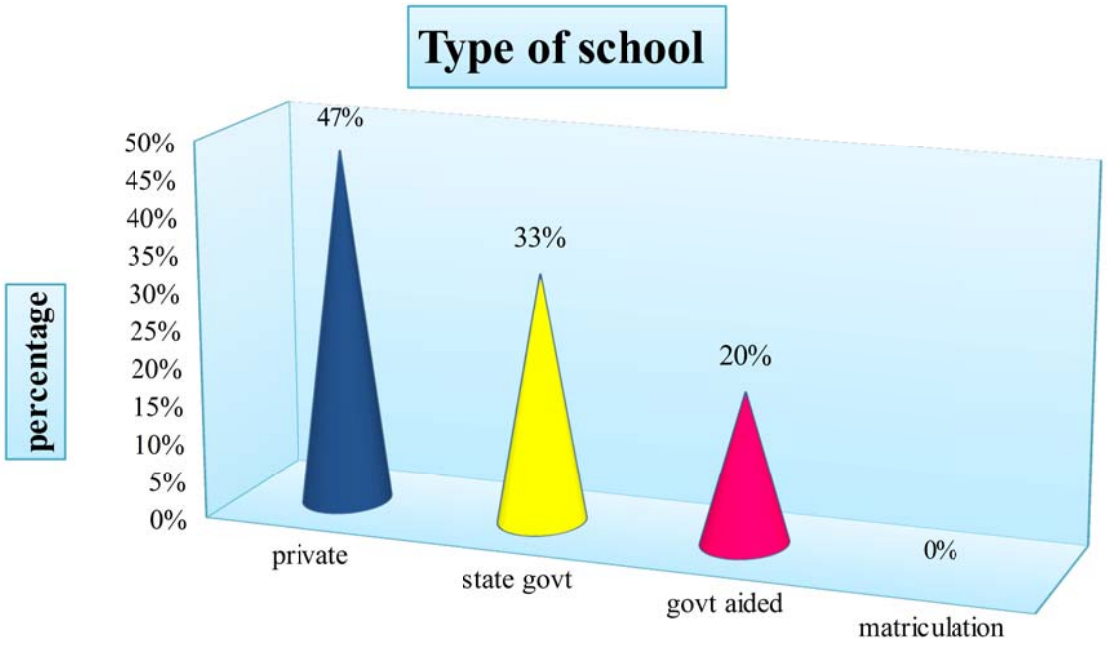

Fig 4.7: Percentage distribution of type of school among primary school teachers

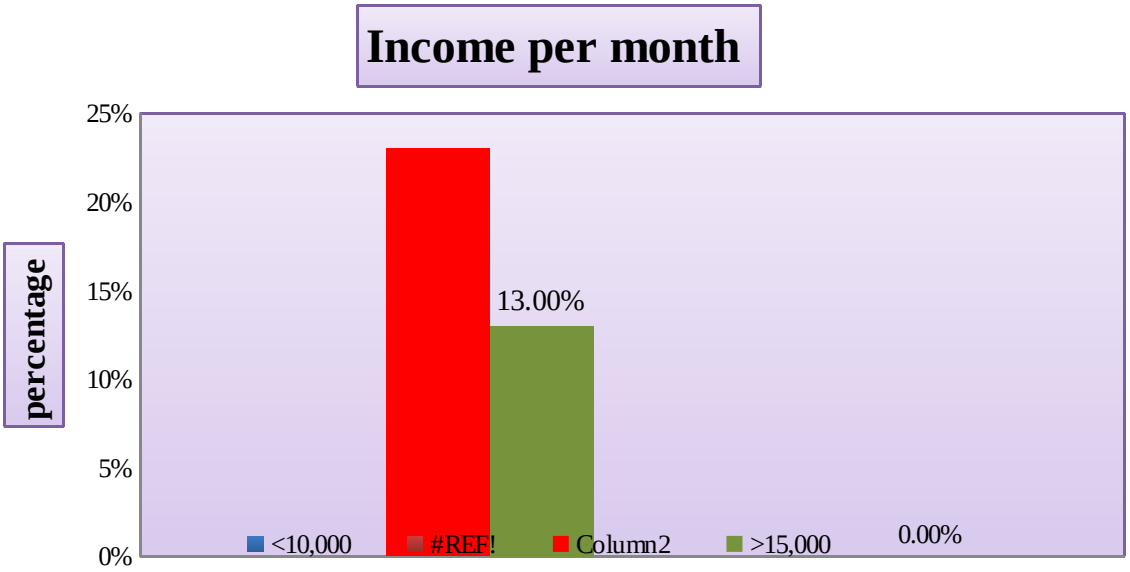

Fig 4.8: Percentage distribution of income per month among primary school teachers

Fig 4.9: Percentage distribution of residency distance from school of the primary school teachers

SECTION -2

ASSESSMENT OF PRE AND POST TEST LEVEL OF AWARENESS REGARDING LEARNING DISABILITY OF CHILDREN AMONG PRIMARY SCHOOL TEACHERS

Table 4.2: Frequency and percentage distribution of pre and post test Level of awareness among primary school teachers regarding learning disability of children

N = 60

S.No	LEVEL OF AWARENESS	PRE TEST		POST TEST	
		N	%	N	%
1	Inadequate	51	85%	0	0

2	Moderately adequate	9	15%	20	33.3%
3	Adequate	0	0	40	66.7%

The above table 4.2 shows that in pretest 51(85%), maximum number of teachers, had inadequate awareness, 9 (15%) had moderately adequate awareness and none of the primary school teachers had adequate awareness. Where as in post test none of the primary school teacher had inadequate awareness, 20 (33.3%) had moderately adequate awareness and maximum number of teacher's 40 (66.7%) had adequate awareness. This indicates that there is improvement in their awareness. So the selected IEC package was effective.

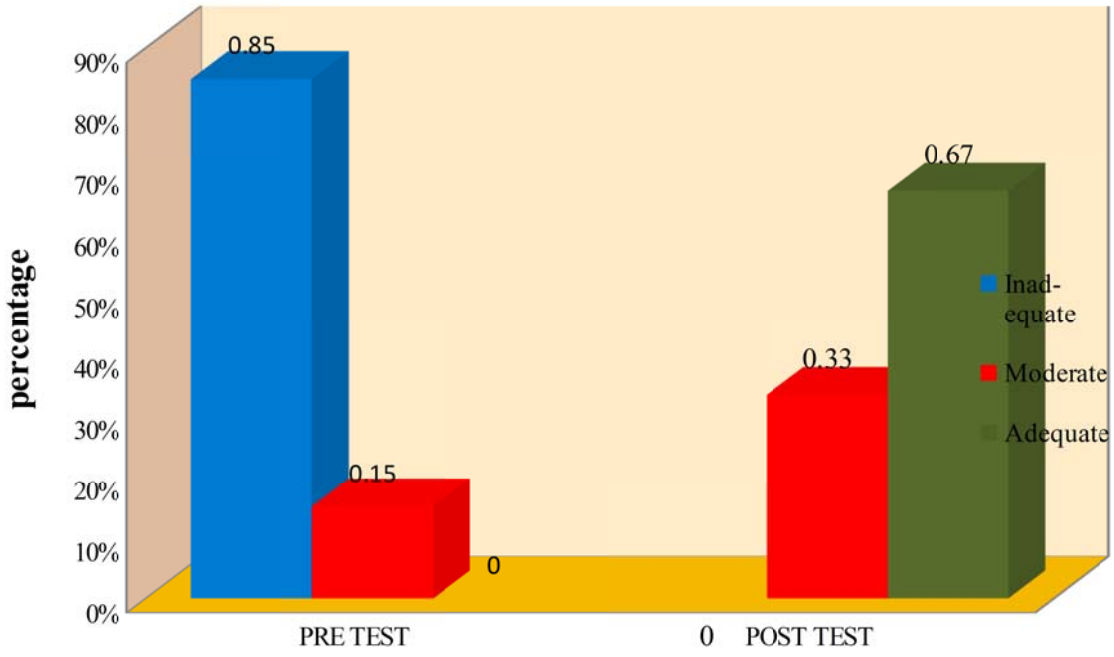

Fig 4.10: Percentage distribution of pre and post test level of awareness among primary school teacher regarding learning disability of children

ASSESSMENT OF PRE AND POST TEST LEVEL OF COPING ABILITY REGARDING LEARNING DISABILITY OF CHILDREN AMONG PRIMARY SCHOOL TEACHERS

Table 4.3: Frequency and percentage distribution of pre and post test Level of coping ability regarding learning disability of children among primary school teachers

N = 60

S.No	LEVEL OF COPING ABILITY	PRE TEST		POST TEST	
		N	%	N	%
1	Inadequate	48	80%	0	0
2	Moderately adequate	12	20%	19	31.7%

3	Adequate	0	0	41	68.3%

The above table 4.3 shows that in pretest 48 (80%), maximum number of teachers, had inadequate coping ability, 12 (20%) had moderately adequate coping ability and none of the primary school teachers had adequate coping ability. Where as in post test none of the primary school teachers had inadequate coping ability, 19 (31.7%) had moderately adequate coping ability and maximum number of teachers, 41 (68.3%), had adequate coping ability. This indicates there is improvement in their coping ability. So the selected IEC package was effective.

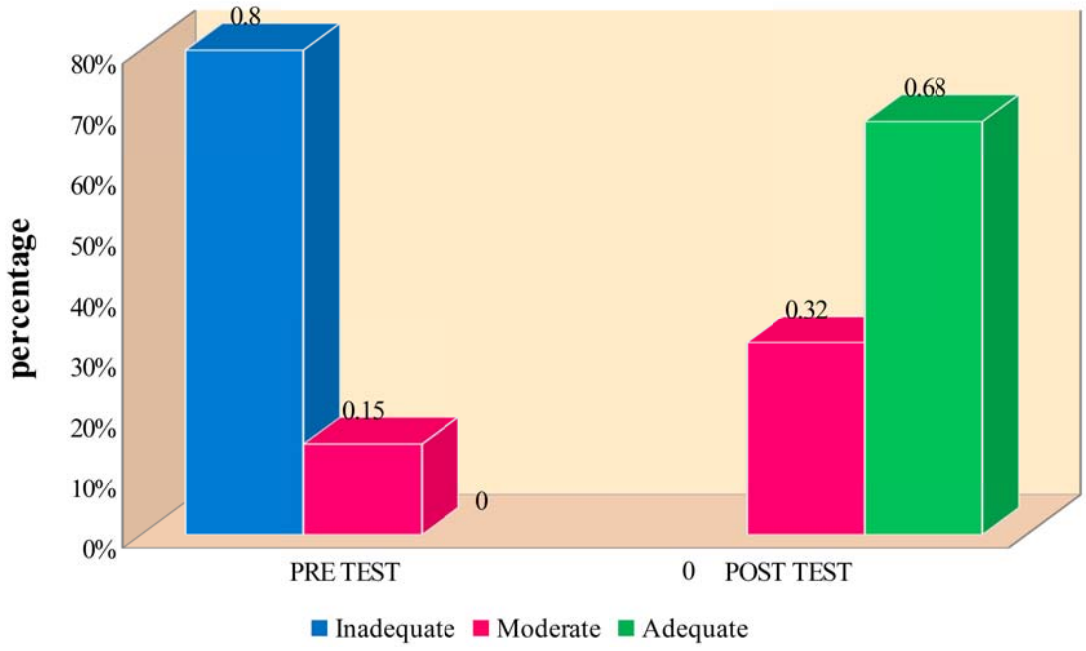

Fig 4.11: Percentage distribution of pre and post test level of coping ability among primary school teacher regarding learning disability of children

SECTION -3

ASSESSMENT OF THE EFFECTIVENESS OF PRE AND POST TEST LEVEL OF AWARENESS AMONG PRIMARY SCHOOL TEACHERS

Table 4.4: Assessment of the effectiveness of pre and post test level of awareness among primary school teacher before & after IEC package.

N=60

VARIABLES	PRETEST		POST TEST		Paired "t" test
	Mean	SD	Mean	SD	t = 3.809

AWARENESS	8.83	2.34	17.7	2.1	Significant

Ho: There is no significant difference in pre and post test scores of awareness of the primary school teachers regard learning disability

Table 4.4 shows the mean & standard deviation of the pre & post test scores on awareness of the primary school teachers regarding learning disability.

Regarding their awareness the pre test mean score was 8.83 with the standard deviation of 2.34 and the post test mean score was 17.7 with the standard deviation of 2.1. The calculated Paired “t” test value CV= 3.809 and TV = 1.980 since CV > TV which is statistically significant at 0.05 level. It shows that there is a significant difference in pre and post test scores of awareness of the primary school teachers regarding learning disability. So the given IEC package was effective.

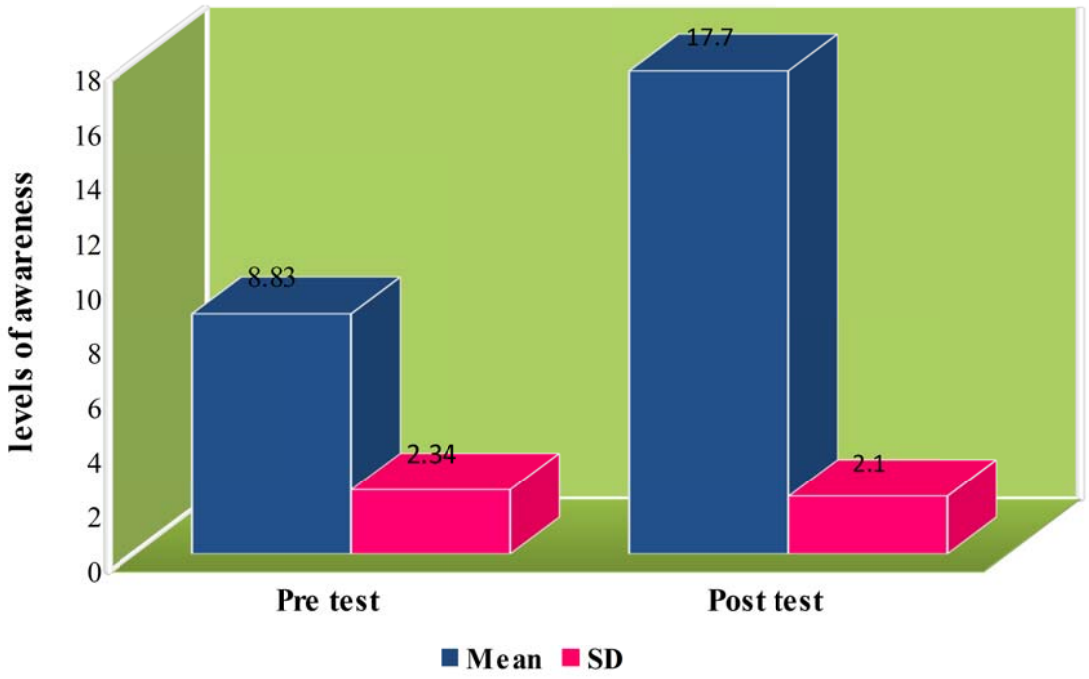

Fig 4.12: Mean and Standard Deviation of pre and post test level of awareness among primary school teacher regarding learning disability of children

ASSESSMENT OF THE EFFECTIVENESS OF IEC PACKAGE ON COPING ABILITY REGARDING LEARNING DISABILITY OF CHILDREN AMONG PRIMARY SCHOOL TEACHERS.

Table 4.5: Assessment of the effectiveness of IEC package on coping ability regarding learning disability of children among primary school teachers.

N=60

VARIABLES	**PRETEST**		**POST TEST**		**Paired "t" test**
	MEAN	**SD**	**MEAN**	**SD**	
COPING ABILITY	9.5	2.09	15.4	1.97	t = 3.841 Significant

H_O: There is no significant difference in pre and post test scores of coping ability of the primary school teacher's regarding learning disability of children.

Table 4.5 shows the mean & standard deviation of the pre & post test scores on coping ability of the primary school teachers regarding learning disability.

Regarding their awareness the pre test mean score was 9.5 with the standard deviation of 2.09 and the post test mean score was 15.4 with the standard deviation of 1.97. The calculated Paired "t" test value CV = 3.841, TV = 1.980 since CV > TV which is statistically significant at 0.05 level. It shows that there is a significant difference in pre and post test scores of coping ability of the primary school teachers regarding learning disability. So the given IEC package was effective.

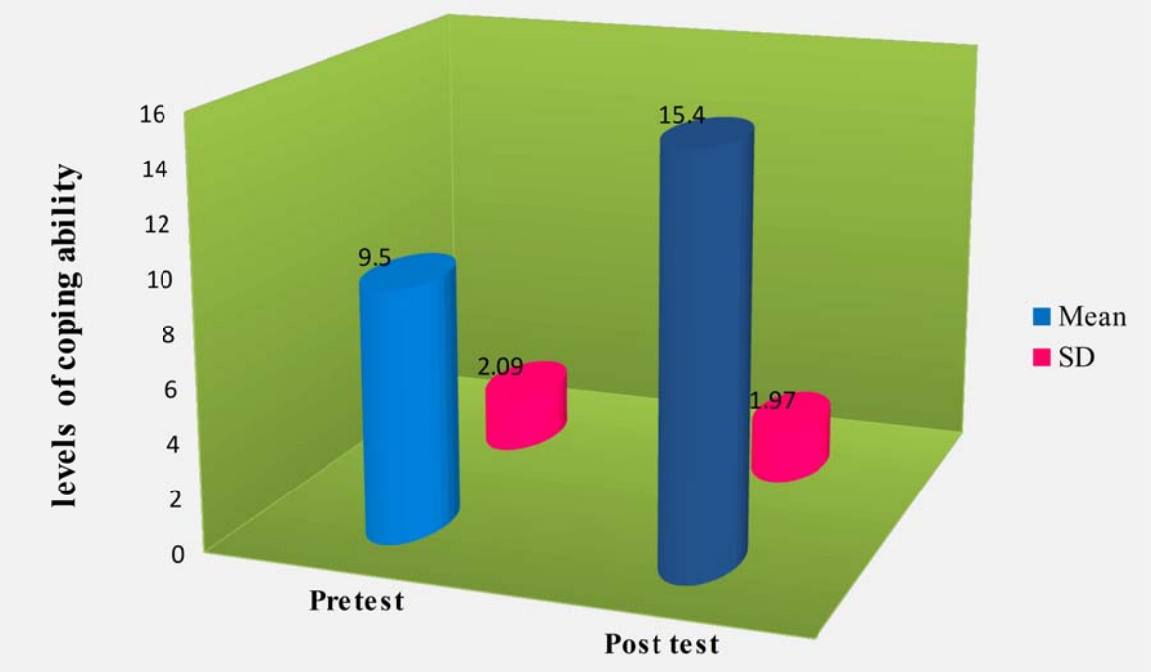

Fig 4.13: Mean and Standard Deviation of pre and post test level of coping ability among primary school teacher regarding learning disability of children

SECTION -4

ASSESSMENT OF CORRELATION BETWEEN POST TEST SCORES OF AWARENESS AND COPING ABILITY REGARDING LEARNING DISABILITY OF CHILDREN AMONG PRIMARY SCHOOL TEACHERS

Table 4.6: correlation between post test scores of awareness and coping ability of the primary school teachers after providing the IEC package.

N=60

VARIABLES	AWARENESS		COPING ABILITY		CORRELATION
	MEAN	SD	MEAN	SD	" r " =0.8 positive and highly significant
POST TEST SCORE	17.7	2.1	15.4	1.97	

Table 4.6 shows the correlation between post test scores on awareness and coping ability among primary school teachers. Regarding their awareness the post test mean score was 17.7 with the standard deviation of 2.1 and regarding their coping ability the post test mean score was 15.4 with the standard deviation of 1.97. The calculated correlation "r" value is 0.8; this indicates that there is positive and highly significant relationship between the awareness and coping ability.

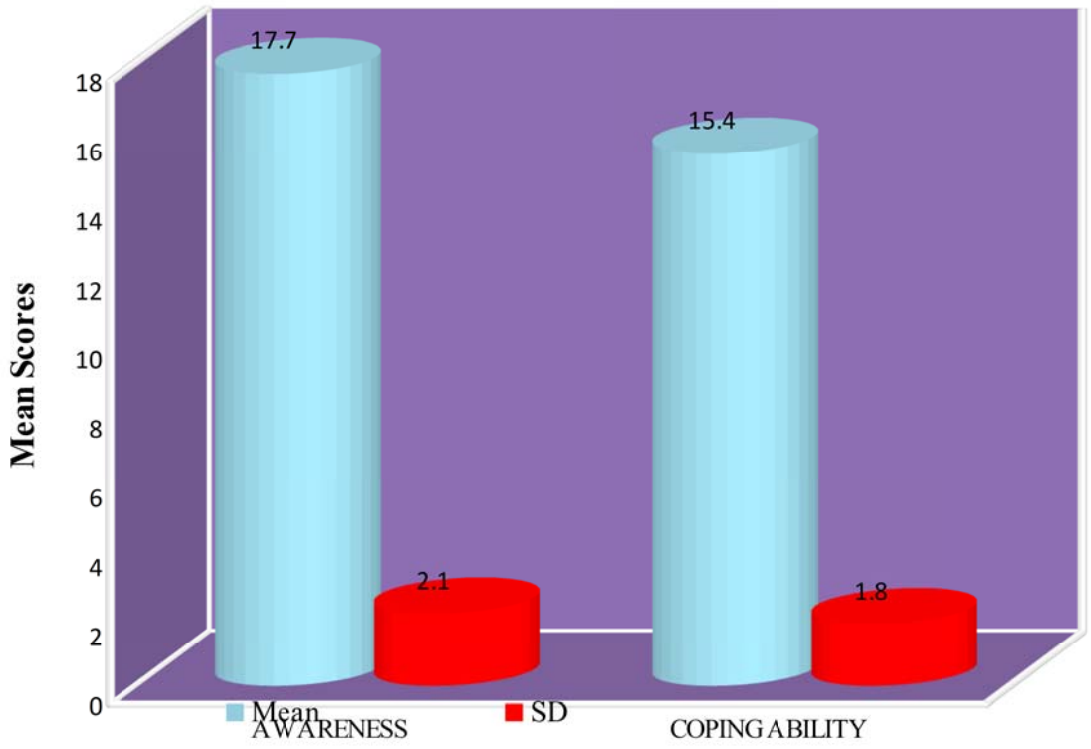

Fig 4.14: correlation between post test score on awareness and coping ability among primary school teacher

Section -5

ASSOCIATION BETWEEN PRE TEST LEVELS OF AWARENESS REGARDING LEARNING DISABILITY OF CHILDREN AMONG PRIMARY SCHOOL TEACHER WITH THEIR SELECTED DEMOGRAPHIC VARIABLES

Table 4.7: Association between pre test levels of awareness regarding learning disability of children among primary school teachers with their selected demographic variables.

$H_{O:}$ There is no significant association between pre test level of awareness and coping ability regarding learning disability of children among primary school teacher with their selected demographic variables (Age, gender, formal training, year of experience, frequency of in-service education, marital status, type of school, income per month, and residential distance).

N=60

Table 4.7 shows that association between pre test level of awareness

S. No	DEMOGRAPHIC VARIABLES		LEVEL OF AWARENESS						
			IA		MA		A		Chi-square value
			(N)	%	(N)	%	(N)	%	
1.	**Age of the teacher**	a) 21- 25 Years	15	25%	2	3%	_	_	0.518 Not Significant
		b) 26- 30 Years	26	43%	5	9%	_	_	
		c) >30 years	10	17%	2	3%	_	_	
2.	**Gender of the teacher**	a) Male	9	15%	3	5%	_	_	1.493 Not Significant
		b) Female	42	70%	6	10 %	_	_	
3.	**Formal training in teaching**	a) D.T Ed	21	35%	4	6%	_	_	0.182 Not Significant
		b) B.Ed	26	43%	4	7%	_	_	
		c) Any other	4	7%	1	2%	_	_	
4.	**Years of the teaching experience**	a) <5 years	12	20%	0	0	_	_	25.239 Significant
		b) 6- 10 years	23	38%	3	5%	_	_	
		c) 11- 15 years	16	27%	2	3%	_	_	
		d) 16- 20 years	0	0	4	7%	_	_	
5.	**Frequency of in service training**	a) One time	20	33%	0	0	_	_	11.762 Not significant
		b) Two time	6	10%	4	7%	_	_	
		c) > 3 time	15	25%	5	8%	_	_	
		d) None	10	17%	0	0	_	_	
6.	**Marital status**	a) Married	25	42%	8	13 %	_	_	4.947 Not significant
		b) Single	23	38%	1	2%	_	_	
		c) Divorced	3	5%	0	0	_	_	
		d) Separated	0	0	0	0	_	_	
7.	**Type of school**	a) Private	20	33%	8	13 %	_	_	7.729 Not significant
		b) State govt	19	32%	1	2%	_	_	
		c) Govt Aided	12	20%	0	0	_	_	
		d) Matriculation	0	0	0	0	_	_	
8.	**Income per month**	a) < 10,000	30	50%	8	13 %	_	_	9.476 Not significant
		b) 10,000-15,000	14	23%	0	0	_	_	
		c) > 15,000	7	12%	1	2%	_	_	
9.	**Residency Distance from school**	a) Walk able distance	33	55%	6	10 %	_	_	13.03 Significant
		b) 1 hour travel	14	23%	1	2%	_	_	
		c) > 1 hour travel	4	7%	2	3%	_	_	

regarding learning disability of children among primary school teacher with their selected demographic variables.

The analysis revealed that there is a significant association of pre test level of awareness is found with demographic variable such as year of the experience, residential distance from school where as there is no significant association found with remaining variable (age, gender, formal training, frequency of in-service education, marital status, type of school and income per month) at 0.05 level.

ASSOCIATION BETWEEN PRE TEST LEVEL OF COPING ABILITY REGARDING LEARNING DISABILITY OF CHILDREN AMONG PRIMARY SCHOOL TEACHER WITH THEIR SELECTED DEMOGRAPHIC VARIABLES

Table 4.8: Association between pre test levels of coping ability regarding learning disability of children among primary school teacher with their selected demographic variables. N=60

S. No	Demographic variables		Level of coping ability						
			IA		MA		A		Chi-square value
			(N)	%	(N)	%	(N)	%	
1.	**Age of the teacher**	a) 21- 25 Years	12	20%	8	13%	_	_	7.974 Not Significant
		b) 26- 30 Years	26	44%	2	3%	_	_	
		c) >30	10	17%	2	3%	_	_	
2.	**Gender of the teacher**	a) Male	13	22%	4	7%	_	_	0.182 Not Significant
		b) Female	35	58%	8	13%	_	_	
3.	**Formal training in teaching**	a) D.T Ed	16	26%	4	7%	_	_	0.117 Not Significant
		b). B.Ed	22	37%	6	10%	_	_	
		c) Any others	10	17%	2	3%	_	_	
4.	**Years of the teaching experience**	a) <5 years	15	25%	4	7%	_	_	0.581 Significant
		b) 6- 10 years	10	17%	2	3%	_	_	
		c) 11- 15 years	15	25%	3	5%	_	_	
		d) >15 years	8	13%	3	5%	_	_	
		a) One time	18	30%	2	3%	_	_	5.625

5.	**Frequency of in service training**	b) Two time	12	20%	3	5%	_	_	Not significant
		c) > 3 time	9	15%	6	10%	_	_	
		d) None	9	15%	1	2%	_	_	
6.	**Marital status**	a) Married	15	25%	4	7%	_	_	3.362 Not significant
		b) Single	21	35%	4	6%	_	_	
		c) Divorced	12	20%	4	7%	_	_	
		d) Separated	0	0	0	0	_	_	
7.	**Type of school**	a) Private	18	30%	5	8%	_	_	0.941 Not significant
		b) State govt	20	33%	4	7%	_	_	
		c) Govt Aided	10	17%	3	5%	_	_	
		d) Matriculation	0	0	0	0	_	_	
8.	**Income per month**	a) < 10,000	31	52%	4	7%	_	_	4.6955 Not significant
		b) 10,000-15,000	7	12%	2	3%	_	_	
		c) > 15,000	10	16%	6	10%	_	_	
9.	**Residency Distance from school**	a) Walkable distance	29	48%	3	5%	_	_	6.845 Not Significant
		b) 1 hour travel	11	18%	3	5%	_	_	
		c) > 1 hr travel	8	14%	6	10%	_	_	

Table 4.8: shows that association between pre test levels of coping ability regarding learning disability of children among primary school teacher with their selected demographic variables.

The analysis revealed that there is no significant association of pre test level of coping ability is found with demographic variable such as age, gender, formal training, year of experience, frequency of in-service education, marital status, type of school, income per month, and residential distance at 0.05 level.

CHAPTER –IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of the data from the selected samples of 60 primary school teachers at selected schools, Thanjavur. Reference to with their awareness and coping ability regarding learning disability of children to evaluate the effectiveness of IEC package.

ORGANIZATION OF DATA

The data collected were grouped and analyzed using descriptive & inferential statistical method. The study findings are presented in five sections according to the objectives.

Section – 1

Frequency and Percentage Distribution of Demographic Variables of Primary School Teacher.

Section – 2

Assessment of pre-test and post-test level of awareness and coping ability regarding learning disability of children among primary school teacher in pre-test & post-test.

Section – 3

Assessment of the effectiveness of IEC package on awareness and coping ability of the subjects regarding learning disability of children among primary school teachers.

Section – 4

Correlate the post test scores of awareness and coping ability regarding learning disability of children among primary school teachers.

Section – 5

Association between pre test level of awareness and coping ability regarding learning disability of children with their selected demographic variables.

PRESENTATION OF DATA

SECTION – 1

ANALYSIS OF DISTRIBUTION OF DEMOGRAPHIC VARIABLES OF PRIMARY SCHOOL TEACHERS

Table 4.1: Frequency and Percentage Distribution of Demographic Variables of Primary School Teachers. N=60

S.NO	DEMOGRAPHIC VARIABLES		FREQUENCY (N)	PERCENTAGE (%)
1.	**Age of the teacher**	a) 21- 25 Years	17	28%
		b) 26- 30 Years	31	52%
		c) >30 years	12	20%
2.	**Gender of the teacher**	a) Male	12	20%
		b) Female	48	80%
3.	**Formal training in teaching**	a) D.T Ed	25	42%
		b) B.Ed	20	50%
		c) Any other degree	5	8%
4.	**Years of the teaching experience**	a) < 5 years	12	20%
		b) 6- 10 years	26	43%
		c) 11- 15 years	18	30%
		d) > 16years	4	7%
5.	**Frequency of in service training**	a) One time	20	33%
		b) Two time	10	17%
		c) > 3 time	20	33%
		d) None	10	17%
6.	**Marital status**	a) Married	33	55%
		b) Single	24	40%
		c) Divorced	3	5%
		d) Separated	0	0
7.	**Type of school**	a) Private	28	47%
		b) State govt	20	33%
		c) Govt Aided	12	20%
		d) Matriculation	0	0
8.	**Income per month**	a) < 10,000	38	64%
		b) 10,000-15,000	14	23%
		c) > 15,000	8	13%
9.	**Residency Distance from school**	**a)** Walk able distance	39	65%
		b) 1 hour travel	15	25%
		c) > 1 hour travel	6	10%

The table 4.1 represents the frequency and percentage distribution of demographic variables of primary school teachers

Above mentioned table shows the distribution of demographic variable related to awareness and coping ability among the primary school teachers.

The data indicated that maximum of 31 (52%) primary school teachers were in age group 26-30 yrs, 17 (28%) of primary school teachers were in age group between 21 -25 yrs, 12 (20%) primary school teachers were in age group >30 yrs.

Considering the gender among primary school teachers, there were 48 (80%) female primary school teachers and remaining 12 (20%) male primary school teachers.

Considering the formal teacher training among the primary school teachers, in that 25 (42%) of them had finished D.T.Ed, 20 (50%) had finished B.Ed and remaining 5 (8%) had done other degree courses.

Considering years of the teaching experience among the primary school teachers, maximum 26 (43%) of them had 6 -10 yrs experience. 18 (30%) of teachers had 11-15 yrs experience, 12 (20%) had got < 5 yrs experience and remaining 4 (7%) had >15 yrs experience in primary school.

Considering the frequency of in-service training among primary school teachers, in that 20 (33%) of primary school teacher had equally attended the in-service training for one time and >3 times, 10 (17%) of them had attended for 2 times and remaining 10 (17%) had not attended any in-service training regarding learning disability.

Considering the marital status among primary school teachers, 33 (55%) were married, 24 (40%) were single and remaining 3 (5%) of them were divorcee. None of them were belonged to the category of separated.

Regarding the type of schools among primary school teachers, 28 (47%) were working in private schools, 20 (33%) of them were working in state government schools and remaining 12 (20%) were working in government aided schools. None of them were working in Matriculation schools.

Regarding income of primary school teachers per month, in those 38 (64%) had an income less than Rs.10, 000 per month, 14 (23%) had Rs.10, 000 –15,000 per month and remaining 8 (13%) samples had an income more than Rs.15, 000 per month.

Considering the distance between the residency and the school among primary school teachers, 39 (65%) lived within able to walk distance from school, 15 (25%) lived in one hour travel from that school, remaining 6 (10%) lived in more than one hour travel from school.

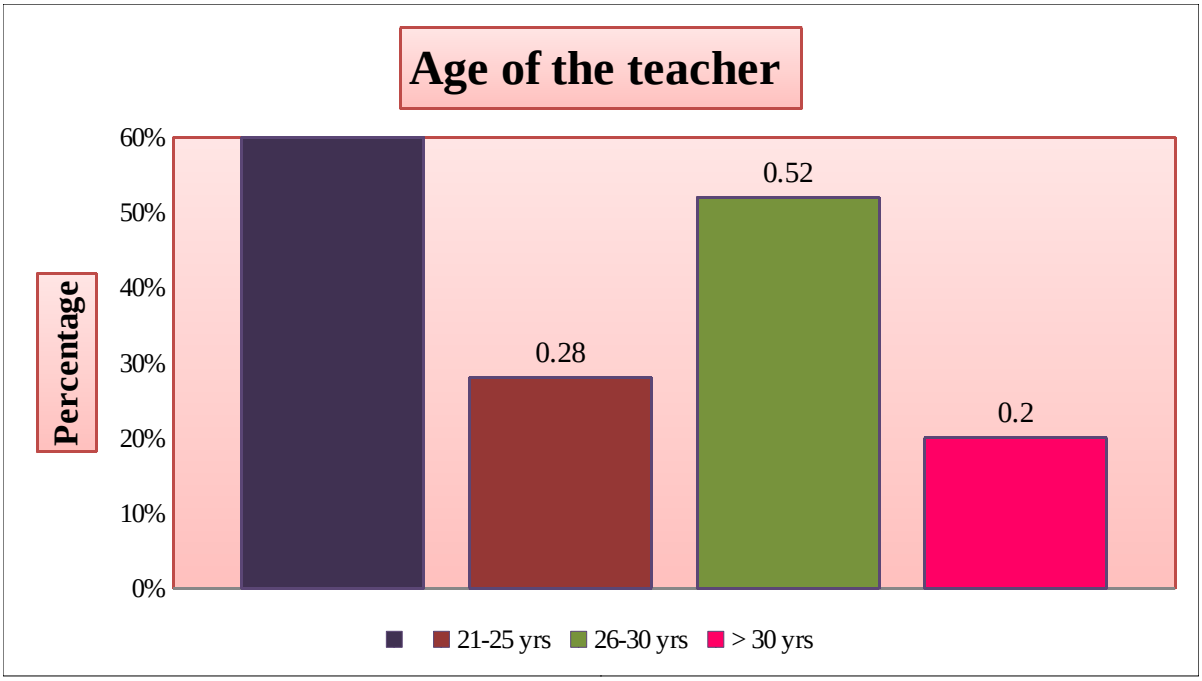

Fig 4.1: P**ercentage distribution of age of the primary school teachers**

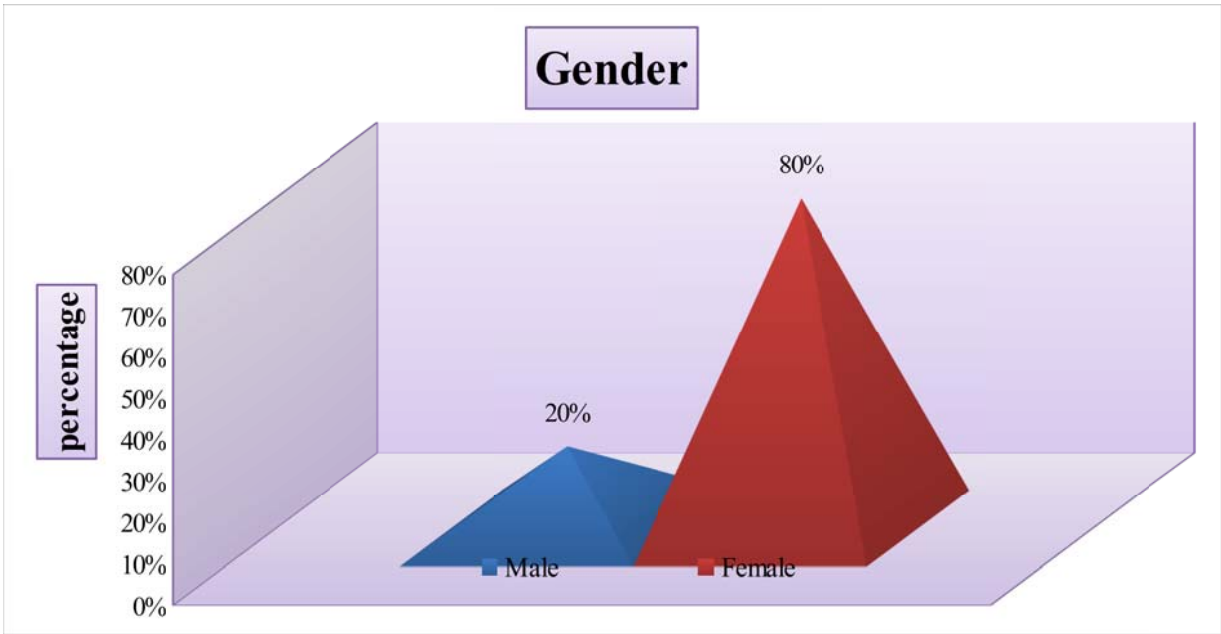

Fig 4.2: Percentage distribution of gender of the primary school teachers

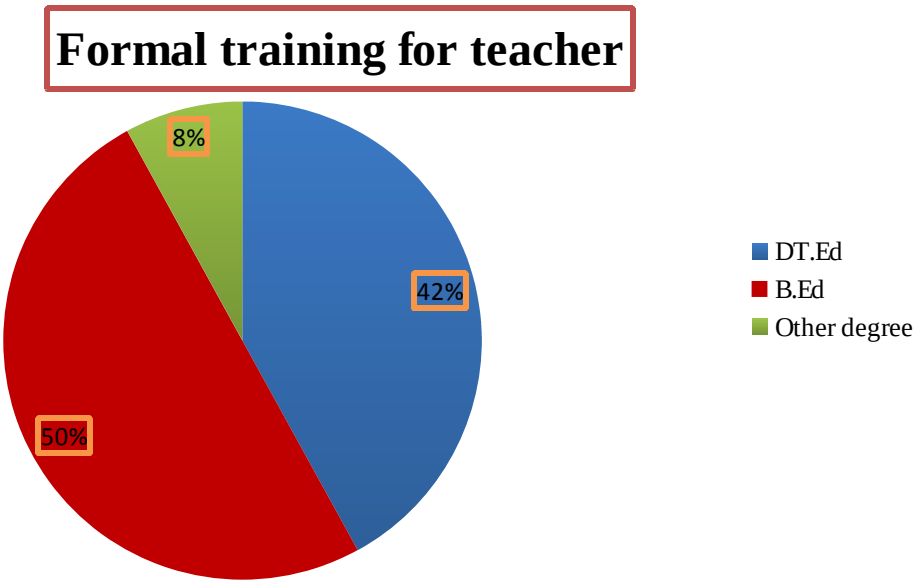

Fig 4.3: Percentage distribution of formal teacher training of the primary school teacher

Fig 4.4: Percentage distribution of year of the teaching experience of the primary school teachers

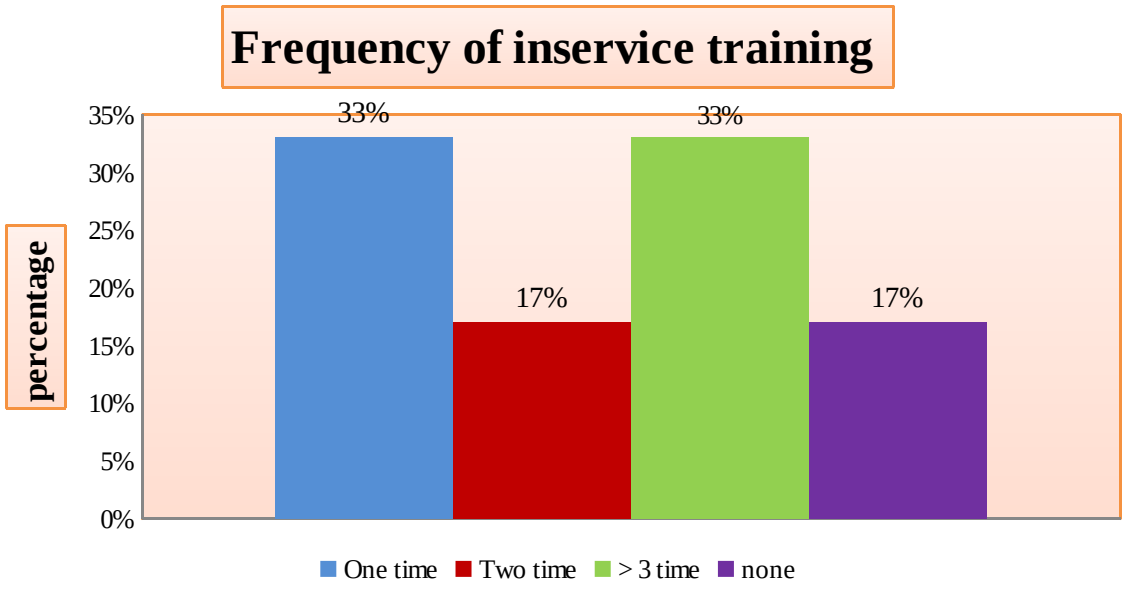

Fig 4.5: Percentage distribution of frequency of in-service training of the primary school teachers

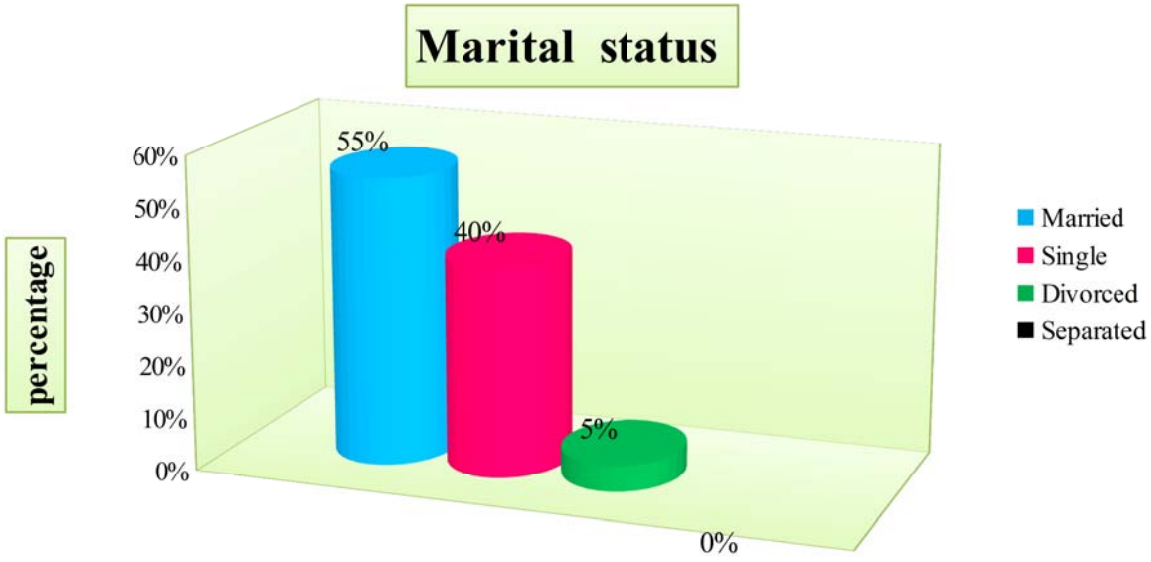

Fig 4.6: Percentage distribution of marital status among primary school teachers

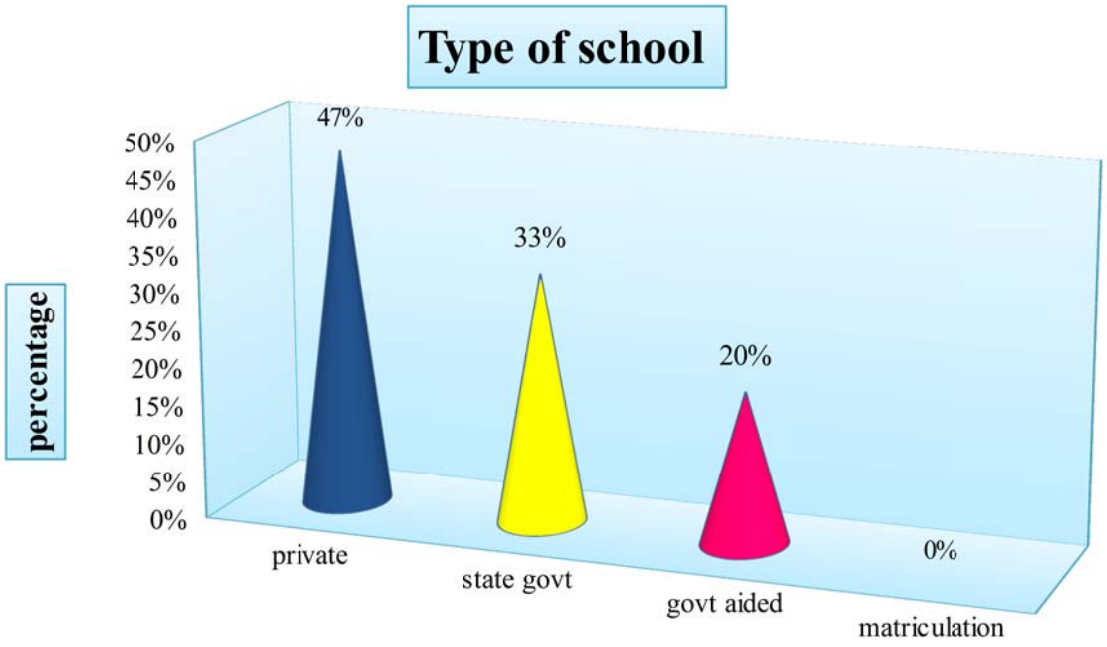

Fig 4.7: Percentage distribution of type of school among primary school teachers

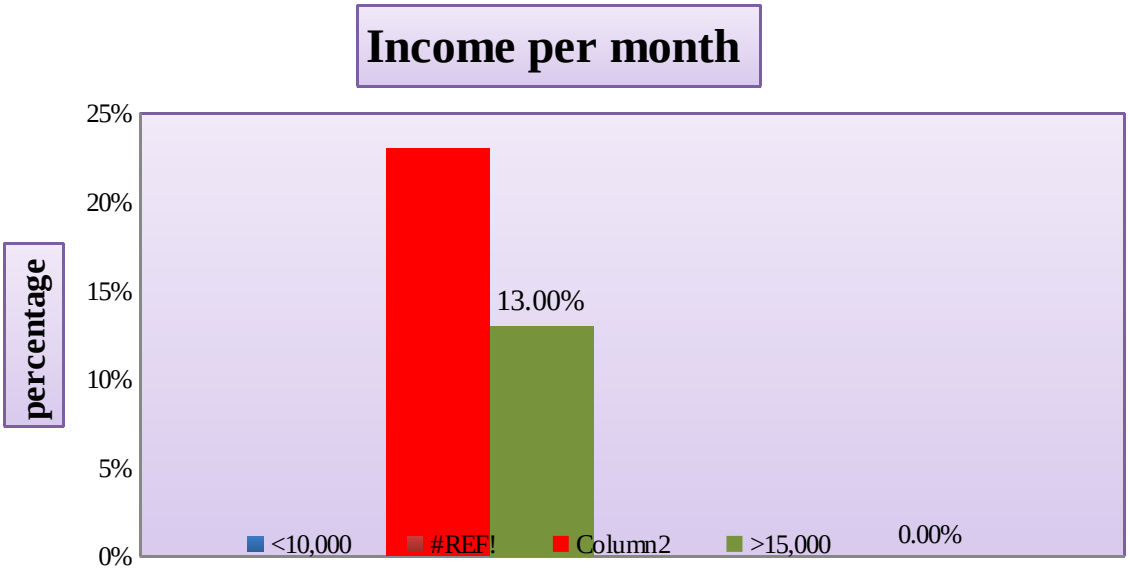

Fig 4.8: Percentage distribution of income per month among primary school teachers

Fig 4.9: Percentage distribution of residency distance from school of the primary school teachers

SECTION -2

ASSESSMENT OF PRE AND POST TEST LEVEL OF AWARENESS REGARDING LEARNING DISABILITY OF CHILDREN AMONG PRIMARY SCHOOL TEACHERS

Table 4.2: Frequency and percentage distribution of pre and post test Level of awareness among primary school teachers regarding learning disability of children

N = 60

S.No	LEVEL OF AWARENESS	PRE TEST		POST TEST	
		N	%	N	%
1	Inadequate	51	85%	0	0

2	Moderately adequate	9	15%	20	33.3%
3	Adequate	0	0	40	66.7%

The above table 4.2 shows that in pretest 51(85%), maximum number of teachers, had inadequate awareness, 9 (15%) had moderately adequate awareness and none of the primary school teachers had adequate awareness. Where as in post test none of the primary school teacher had inadequate awareness, 20 (33.3%) had moderately adequate awareness and maximum number of teacher's 40 (66.7%) had adequate awareness. This indicates that there is improvement in their awareness. So the selected IEC package was effective.

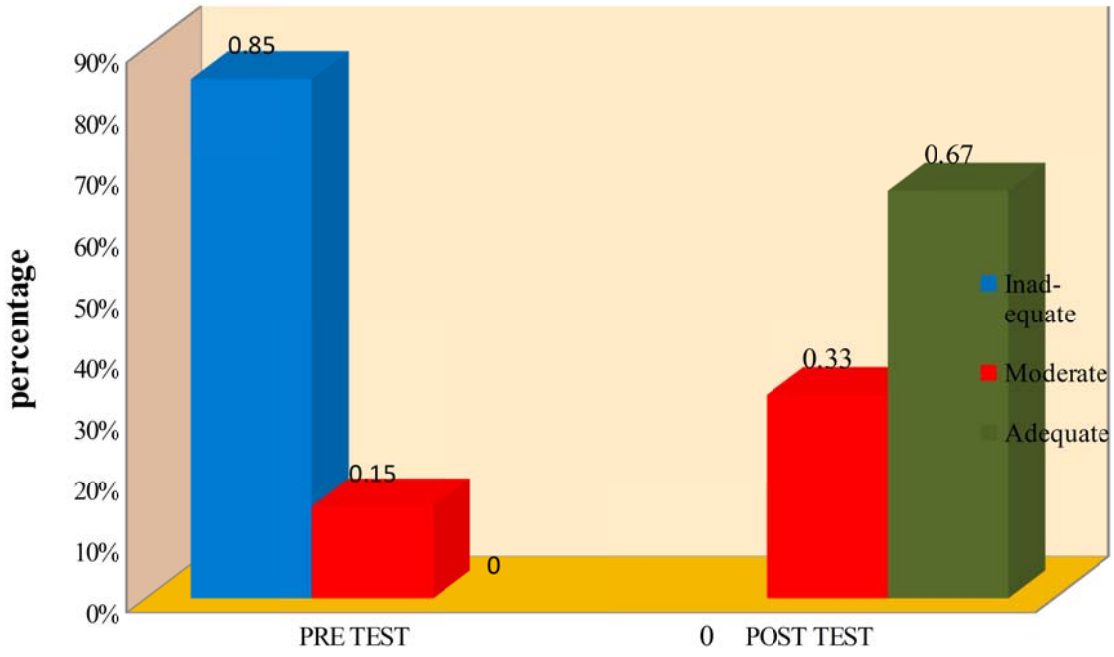

Fig 4.10: Percentage distribution of pre and post test level of awareness among primary school teacher regarding learning disability of children

ASSESSMENT OF PRE AND POST TEST LEVEL OF COPING ABILITY REGARDING LEARNING DISABILITY OF CHILDREN AMONG PRIMARY SCHOOL TEACHERS

Table 4.3: Frequency and percentage distribution of pre and post test Level of coping ability regarding learning disability of children among primary school teachers

N = 60

S.No	LEVEL OF COPING ABILITY	PRE TEST		POST TEST	
		N	%	N	%
1	Inadequate	48	80%	0	0
2	Moderately adequate	12	20%	19	31.7%

3	Adequate	0	0	41	68.3%

The above table 4.3 shows that in pretest 48 (80%), maximum number of teachers, had inadequate coping ability, 12 (20%) had moderately adequate coping ability and none of the primary school teachers had adequate coping ability. Where as in post test none of the primary school teachers had inadequate coping ability, 19 (31.7%) had moderately adequate coping ability and maximum number of teachers, 41 (68.3%), had adequate coping ability. This indicates there is improvement in their coping ability. So the selected IEC package was effective.

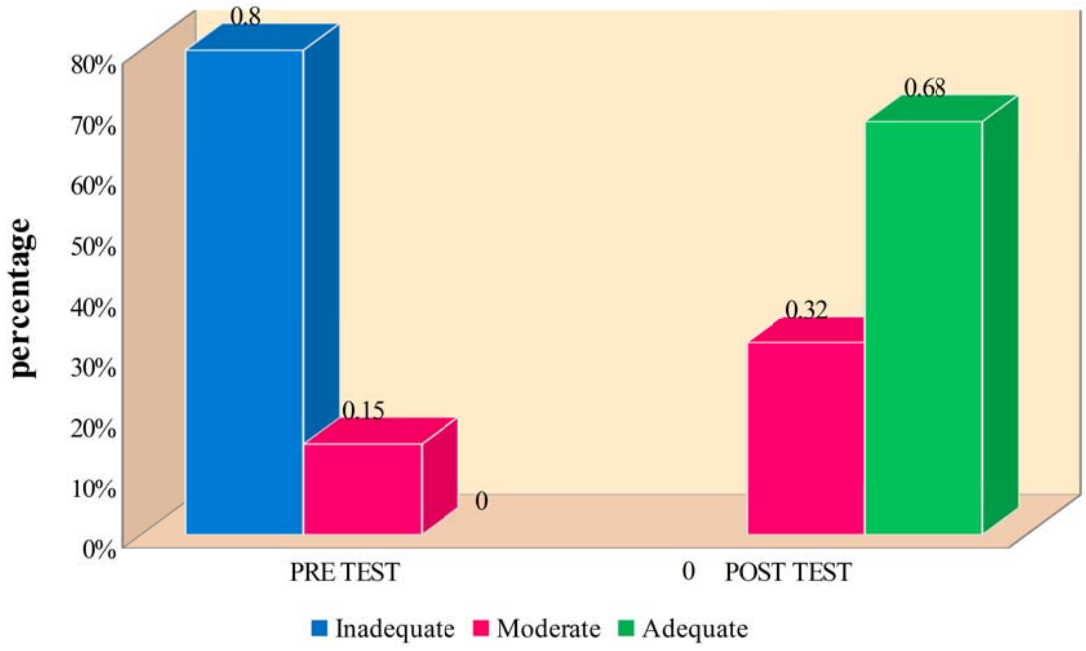

Fig 4.11: Percentage distribution of pre and post test level of coping ability among primary school teacher regarding learning disability of children

SECTION -3

ASSESSMENT OF THE EFFECTIVENESS OF PRE AND POST TEST LEVEL OF AWARENESS AMONG PRIMARY SCHOOL TEACHERS

Table 4.4: Assessment of the effectiveness of pre and post test level of awareness among primary school teacher before & after IEC package.

N=60

VARIABLES	PRETEST		POST TEST		Paired "t" test
	Mean	SD	Mean	SD	t = 3.809

AWARENESS	8.83	2.34	17.7	2.1	Significant

Ho: There is no significant difference in pre and post test scores of awareness of the primary school teachers regard learning disability

Table 4.4 shows the mean & standard deviation of the pre & post test scores on awareness of the primary school teachers regarding learning disability.

Regarding their awareness the pre test mean score was 8.83 with the standard deviation of 2.34 and the post test mean score was 17.7 with the standard deviation of 2.1. The calculated Paired “t” test value CV= 3.809 and TV = 1.980 since CV > TV which is statistically significant at 0.05 level. It shows that there is a significant difference in pre and post test scores of awareness of the primary school teachers regarding learning disability. So the given IEC package was effective.

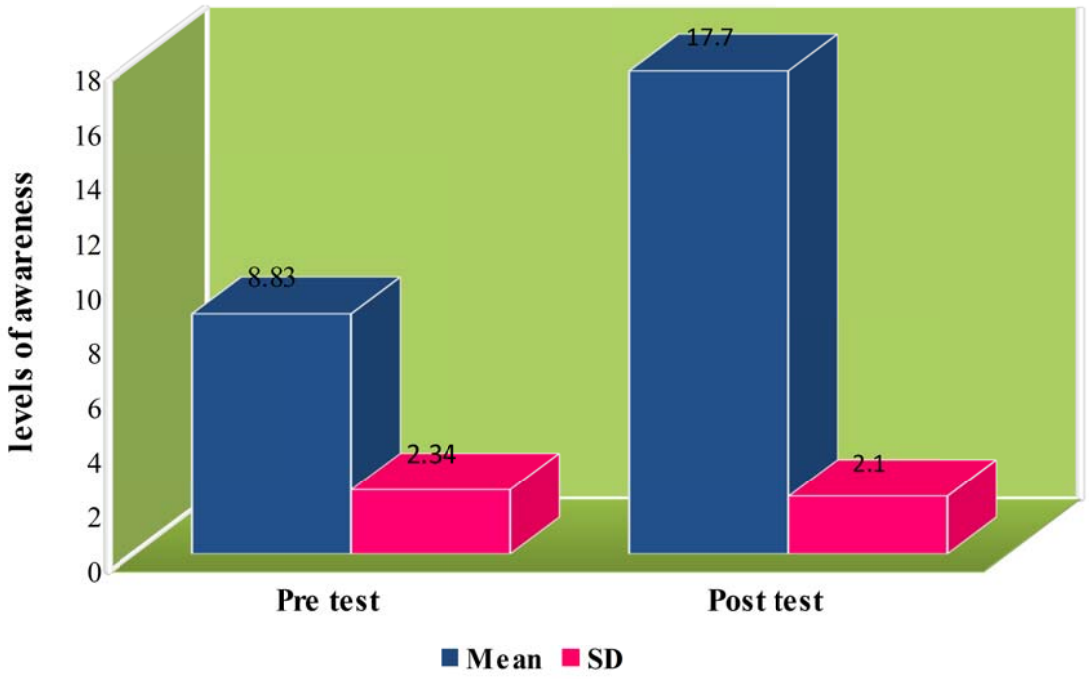

Fig 4.12: Mean and Standard Deviation of pre and post test level of awareness among primary school teacher regarding learning disability of children

ASSESSMENT OF THE EFFECTIVENESS OF IEC PACKAGE ON COPING ABILITY REGARDING LEARNING DISABILITY OF CHILDREN AMONG PRIMARY SCHOOL TEACHERS.

Table 4.5: Assessment of the effectiveness of IEC package on coping ability regarding learning disability of children among primary school teachers.

N=60

VARIABLES	**PRETEST**		**POST TEST**		**Paired "t" test**
	MEAN	**SD**	**MEAN**	**SD**	
COPING ABILITY	9.5	2.09	15.4	1.97	t = 3.841 Significant

H_O: There is no significant difference in pre and post test scores of coping ability of the primary school teacher's regarding learning disability of children.

Table 4.5 shows the mean & standard deviation of the pre & post test scores on coping ability of the primary school teachers regarding learning disability.

Regarding their awareness the pre test mean score was 9.5 with the standard deviation of 2.09 and the post test mean score was 15.4 with the standard deviation of 1.97. The calculated Paired "t" test value CV = 3.841, TV = 1.980 since CV > TV which is statistically significant at 0.05 level. It shows that there is a significant difference in pre and post test scores of coping ability of the primary school teachers regarding learning disability. So the given IEC package was effective.

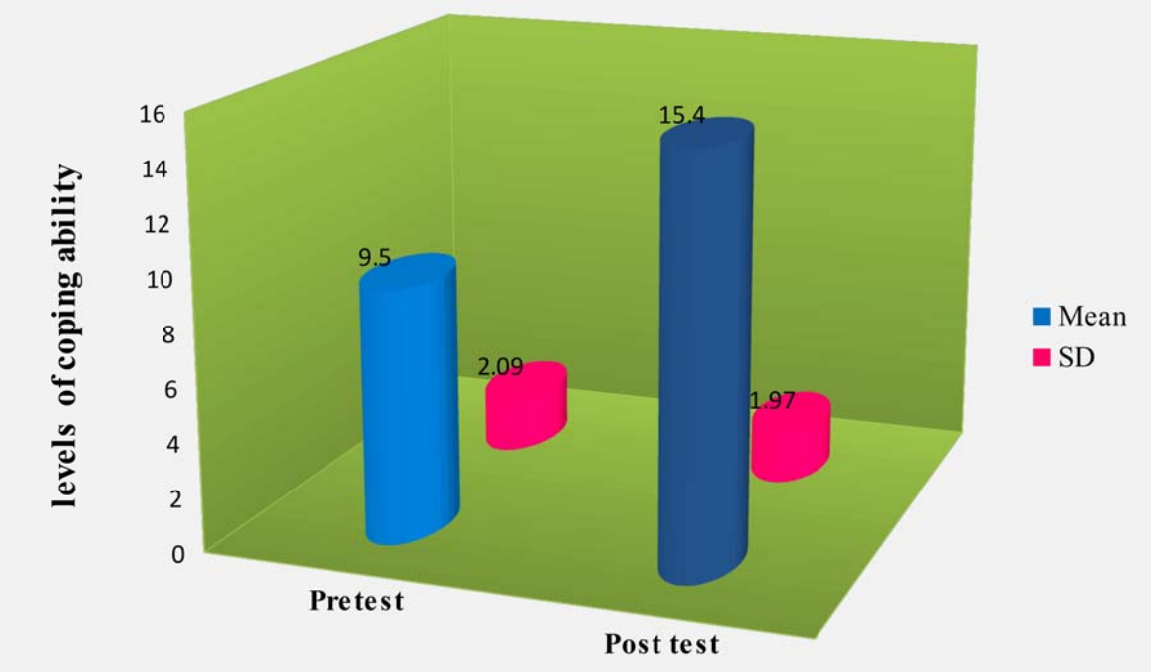

Fig 4.13: Mean and Standard Deviation of pre and post test level of coping ability among primary school teacher regarding learning disability of children

SECTION -4

ASSESSMENT OF CORRELATION BETWEEN POST TEST SCORES OF AWARENESS AND COPING ABILITY REGARDING LEARNING DISABILITY OF CHILDREN AMONG PRIMARY SCHOOL TEACHERS

Table 4.6: correlation between post test scores of awareness and coping ability of the primary school teachers after providing the IEC package.

N=60

VARIABLES	AWARENESS		COPING ABILITY		CORRELATION
	MEAN	SD	MEAN	SD	" r " =0.8 positive and highly significant
POST TEST SCORE	17.7	2.1	15.4	1.97	

Table 4.6 shows the correlation between post test scores on awareness and coping ability among primary school teachers. Regarding their awareness the post test mean score was 17.7 with the standard deviation of 2.1 and regarding their coping ability the post test mean score was 15.4 with the standard deviation of 1.97. The calculated correlation "r" value is 0.8; this indicates that there is positive and highly significant relationship between the awareness and coping ability.

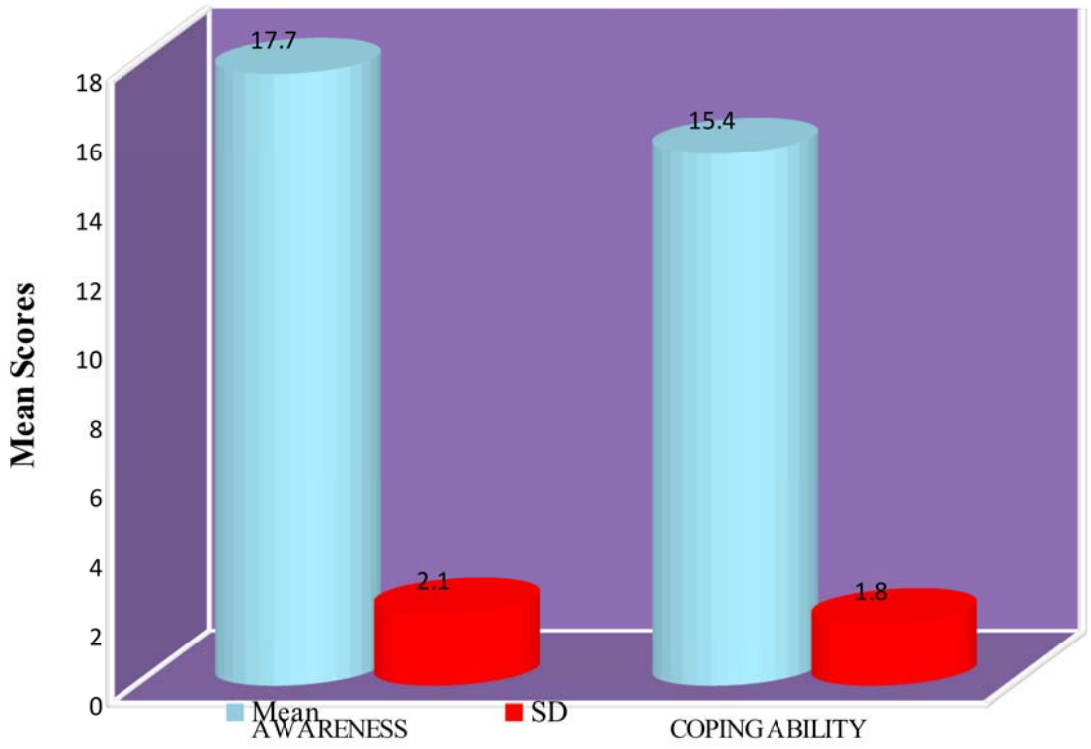

Fig 4.14: correlation between post test score on awareness and coping ability among primary school teacher

Section -5

ASSOCIATION BETWEEN PRE TEST LEVELS OF AWARENESS REGARDING LEARNING DISABILITY OF CHILDREN AMONG PRIMARY SCHOOL TEACHER WITH THEIR SELECTED DEMOGRAPHIC VARIABLES

Table 4.7: Association between pre test levels of awareness regarding learning disability of children among primary school teachers with their selected demographic variables.

$H_{O:}$ There is no significant association between pre test level of awareness and coping ability regarding learning disability of children among primary school teacher with their selected demographic variables (Age, gender, formal training, year of experience, frequency of in-service education, marital status, type of school, income per month, and residential distance).

N=60

Table 4.7 shows that association between pre test level of awareness

S. No	DEMOGRAPHIC VARIABLES		LEVEL OF AWARENESS						
			IA		MA		A		Chi-square value
			(N)	%	(N)	%	(N)	%	
1.	**Age of the teacher**	a) 21- 25 Years	15	25%	2	3%	_	_	0.518 Not Significant
		b) 26- 30 Years	26	43%	5	9%	_	_	
		c) >30 years	10	17%	2	3%	_	_	
2.	**Gender of the teacher**	a) Male	9	15%	3	5%	_	_	1.493 Not Significant
		b) Female	42	70%	6	10 %	_	_	
3.	**Formal training in teaching**	a) D.T Ed	21	35%	4	6%	_	_	0.182 Not Significant
		b) B.Ed	26	43%	4	7%	_	_	
		c) Any other	4	7%	1	2%	_	_	
4.	**Years of the teaching experience**	a) <5 years	12	20%	0	0	_	_	25.239 Significant
		b) 6- 10 years	23	38%	3	5%	_	_	
		c) 11- 15 years	16	27%	2	3%	_	_	
		d) 16- 20 years	0	0	4	7%	_	_	
5.	**Frequency of in service training**	a) One time	20	33%	0	0	_	_	11.762 Not significant
		b) Two time	6	10%	4	7%	_	_	
		c) > 3 time	15	25%	5	8%	_	_	
		d) None	10	17%	0	0	_	_	
6.	**Marital status**	a) Married	25	42%	8	13 %	_	_	4.947 Not significant
		b) Single	23	38%	1	2%	_	_	
		c) Divorced	3	5%	0	0	_	_	
		d) Separated	0	0	0	0	_	_	
7.	**Type of school**	a) Private	20	33%	8	13 %	_	_	7.729 Not significant
		b) State govt	19	32%	1	2%	_	_	
		c) Govt Aided	12	20%	0	0	_	_	
		d) Matriculation	0	0	0	0	_	_	
8.	**Income per month**	a) < 10,000	30	50%	8	13 %	_	_	9.476 Not significant
		b) 10,000-15,000	14	23%	0	0	_	_	
		c) > 15,000	7	12%	1	2%	_	_	
9.	**Residency Distance from school**	a) Walk able distance	33	55%	6	10 %	_	_	13.03 Significant
		b) 1 hour travel	14	23%	1	2%	_	_	
		c) > 1 hour travel	4	7%	2	3%	_	_	

regarding learning disability of children among primary school teacher with their selected demographic variables.

The analysis revealed that there is a significant association of pre test level of awareness is found with demographic variable such as year of the experience, residential distance from school where as there is no significant association found with remaining variable (age, gender, formal training, frequency of in-service education, marital status, type of school and income per month) at 0.05 level.

ASSOCIATION BETWEEN PRE TEST LEVEL OF COPING ABILITY REGARDING LEARNING DISABILITY OF CHILDREN AMONG PRIMARY SCHOOL TEACHER WITH THEIR SELECTED DEMOGRAPHIC VARIABLES

Table 4.8: Association between pre test levels of coping ability regarding learning disability of children among primary school teacher with their selected demographic variables. N=60

S. No	Demographic variables		Level of coping ability						
			IA		MA		A		Chi-square value
			(N)	%	(N)	%	(N)	%	
1.	**Age of the teacher**	a) 21- 25 Years	12	20%	8	13%	_	_	7.974 Not Significant
		b) 26- 30 Years	26	44%	2	3%	_	_	
		c) >30	10	17%	2	3%	_	_	
2.	**Gender of the teacher**	a) Male	13	22%	4	7%	_	_	0.182 Not Significant
		b) Female	35	58%	8	13%	_	_	
3.	**Formal training in teaching**	a) D.T Ed	16	26%	4	7%	_	_	0.117 Not Significant
		b). B.Ed	22	37%	6	10%	_	_	
		c) Any others	10	17%	2	3%	_	_	
4.	**Years of the teaching experience**	a) <5 years	15	25%	4	7%	_	_	0.581 Significant
		b) 6- 10 years	10	17%	2	3%	_	_	
		c) 11- 15 years	15	25%	3	5%	_	_	
		d) >15 years	8	13%	3	5%	_	_	
		a) One time	18	30%	2	3%	_	_	5.625

5.	**Frequency of in service training**	b) Two time	12	20%	3	5%	_	_	Not significant
		c) > 3 time	9	15%	6	10%	_	_	
		d) None	9	15%	1	2%	_	_	
6.	**Marital status**	a) Married	15	25%	4	7%	_	_	3.362 Not significant
		b) Single	21	35%	4	6%	_	_	
		c) Divorced	12	20%	4	7%	_	_	
		d) Separated	0	0	0	0	_	_	
7.	**Type of school**	a) Private	18	30%	5	8%	_	_	0.941 Not significant
		b) State govt	20	33%	4	7%	_	_	
		c) Govt Aided	10	17%	3	5%	_	_	
		d) Matriculation	0	0	0	0	_	_	
8.	**Income per month**	a) < 10,000	31	52%	4	7%	_	_	4.6955 Not significant
		b) 10,000-15,000	7	12%	2	3%	_	_	
		c) > 15,000	10	16%	6	10%	_	_	
9.	**Residency Distance from school**	a) Walkable distance	29	48%	3	5%	_	_	6.845 Not Significant
		b) 1 hour travel	11	18%	3	5%	_	_	
		c) > 1 hr travel	8	14%	6	10%	_	_	

Table 4.8: shows that association between pre test levels of coping ability regarding learning disability of children among primary school teacher with their selected demographic variables.

The analysis revealed that there is no significant association of pre test level of coping ability is found with demographic variable such as age, gender, formal training, year of experience, frequency of in-service education, marital status, type of school, income per month, and residential distance at 0.05 level.

CHAPTER –V

DISCUSSION

This chapter deals with the discussion of the study with appropriate literature review, statistical analysis and the findings of the study based on the study objectives and hypothesis.

The aim of the present study was to assess the effectiveness of IEC package on awareness and coping ability regarding learning disability among primary school teachers at selected schools, Thanjavur**.**

The study was a pre experimental study, with one group pre and post test design. A total of 60 primary school teachers were selected for the study by using non probability convenient sampling method. Pretest was conducted by using semi structured questionnaire for the entire primary school teachers. The teaching programme was conducted by the investigator. After one week, the post – test was conducted by using the same questionnaire. Results of the study were discussed based on the study objectives and hypothesis.

The first step of the investigator was to assess the demographic variables of the primary school teacher. The analysis of frequency and percentage distribution of demographic variables related to learning disability of children among primary school teacher reveals that a maximum of 30 (50%) primary school teacher were in age group 26-30 yrs, minimum of 10 (17%) of primary school teacher were in age group > 30 yrs. Considering the gender, maximum 48 (80%) were female primary school teachers and remaining 12 (20%) were male primary school teachers. Considering the formal teacher training, maximum 25 (42%) of primary school teachers had finished D.T.Ed, minimum 5 (8%) had done other degree courses. Considering year of the teaching experience maximum 26 (43%) had 6

-10 yrs experience and Minimum 4 (7%) had >15yrs experiences in primary school. Considering the frequency of in-service training, maximum 20 (33%) of primary school teacher had equally attended the in-service training for one time and >3 times and 10 (17%) had not attended any in-service training. Considering the marital status, maximum 33 (55%) were married, 24 (40%) were single, remaining 3 (5%) were divorces. None of them were separated. Regarding the type of school, maximum 28 (47%) were working in private school and minimum 12 (20%) were working in government aided schools. Regarding income of primary school teachers per month, maximum 38 (64%) got less than Rs.10000 per month and minimum 8 (13%) samples were getting more than Rs.15000 per month. Considering distance from school, maximum 39 (65%) were residing in walk able distance from school and minimum 6 (10%) were residing in more than one hour travel from school.

The first objective of the study was to assess the pre and post test level of awareness and coping ability regarding Learning disability of children among primary school teachers.

In this study regarding the level of awareness, in pretest 51 (85%) maximum number of teachers had inadequate awareness, 9 (15%) had moderately adequate awareness and none of the primary school teachers had adequate awareness. Where as in post test none of the primary school teachers had inadequate awareness, 20 (33.3%) had moderately adequate awareness and maximum number of teachers 40 (66.7%) had adequate awareness. According to level of coping ability, in pretest 48 (80%) maximum number of teachers had inadequate coping ability, 12 (20%) had moderately adequate coping ability and none of the primary school teachers had adequate coping ability. Where as in post test none of the primary school teachers had inadequate coping ability, 19 (31.7%)

had moderately adequate coping ability and maximum number of teachers 41 (68.3%) had adequate coping ability.

These findings indicated that there was an improvement in their awareness and coping ability. So the given IEC package was effective.

Similar results were obtained by **Landry SH. Et.al., (2011)** who conducted a quasi experimental study among preschool teacher. In this study 750 teachers are assessed by pre and post test with statewide intervention. It showed that the greater gain were found for children in target classroom than for those in control classroom for all skills in year 2 and this varied by programme site.

Second objective of the study was to assess the effectiveness of pre and post test level of awareness and coping ability among primary school teacher before & after IEC package.

Regarding the level of awareness, in pretest none of the primary school teachers had adequate awareness and in post test 40 (66.7%) had adequate awareness and the pre test mean score was 8.83 with the standard deviation of 2.34 and in post test, mean score was 17.7 with the standard deviation of 2.1. The Paired “t” test value was 3.809, TV = 1.980. Since CV > TV. This indicated there was an improvement in their awareness. Regarding level of coping ability, in pretest none of the primary school teachers had adequate coping ability and in post test 41(68.3%) had adequate coping ability. The pre test mean score was 9.5 with the standard deviation of 2.09 and the post test mean score was 15.4 with the standard deviation of 1.97. The Paired “t” test value CV = 3.841, TV = 1.980.since CV> TV. This indicated there was an improvement in their coping ability. Which was statistically significant at 0.05 level which show that there was a significant difference in level of awareness and coping ability among primary school teachers.

Hence the **research hypothesis (H_1)** stated that "there is a significant difference between pre and post test scores of awareness and coping ability regarding Learning disability of children among primary school teachers before and after IEC Package" was accepted. So research hypothesis **H_1** was accepted.

Similar results were obtained by **Jimnez JE (2010)** who conducted a study on effectiveness of computer assisted practice on reading and spelling in children with learning disability. It was a comparative study, conducted at Spain on 85 children with learning disability. The investigator compared 3 practice conditions, one with reading, two with spelling, in order to test whether computer based reading and spelling practice had an influence on the development of reading and spelling ability in children with LD. Overall results showed that reading training did not improve spelling; however, the children who participated in the copy training condition improved their spelling skills.

The third objective of the study was to correlate the post test scores of awareness and coping ability regarding learning disability of children among primary school teachers.

Regarding their awareness the post test mean score was 17.7 with the standard deviation of 2.1 and regarding their coping ability the post test mean score was 15.4 with the standard deviation of 1.97. The correlation value r = 0.8; this indicated that there was highly positive & significant relation in their awareness and coping ability.

Hence the **research hypothesis (H_2)** stated that "there is a significant correlation between the post test scores of awareness and coping ability regarding learning disability of children among primary school teachers". **H_2** was accepted.

The fourth objective of the study was to assess the association between pre test levels of awareness and coping ability regarding learning disability of children among primary school teachers with their selected demographic variables

In this present study, related to awareness there was a significant association of pre test levels of awareness found with demographic variables such as year of the experience, residential distance from school, and in the same there was no significant association found with remaining variables (age, gender, formal training, frequency of in-service education, marital status, type of school, income per month) at 0.05 level. Related to coping ability there was no significant association of pre test levels of coping ability found with demographic variables such as age, gender, formal training, year of experience, frequency of in-service education, marital status, type of school, income per month, and residential distance at 0.05 level.

Hence the **research hypothesis (H_3)** stated that "There is a significant association between pre test levels of awareness and coping ability regarding learning disability of children among primary school teachers "was accepted with variables which was related to the level of awareness such as year of experience, residential distance from school and remaining variables are rejected. Related to level of coping ability research hypothesis **H_3** rejected to all the variables.

CHAPTER – VI

SUMMARY AND CONCLUSION

This chapter deals with the summary, conclusion, implication, recommendations and limitations.

SUMMARY

The present study stated as effectiveness of IEC package on awareness and coping ability regarding Learning Disability of children among primary school teachers at selected schools, Thanjavur. The pre experimental one group pre and post test design was adopted; total 60 primary school teachers were selected by using non probability convenient sampling technique. For the data collection, the investigator got the written formal permission from the head of the school and before the data collection oral consent obtained from the samples. In the first day pre test was conducted by semi structured questionnaire on awareness and coping ability regarding learning disability of children. On second day IEC package provided to the samples and after 7 days post test was conducted by using same questionnaire.

The findings of the study revealed that, on comparison of pre and post test level of awareness and coping ability, found to be statistically significant at the level of 0.05 and it is indicated that there was a significant improvement in the level of awareness and coping ability, proved the effectiveness of IEC package on learning disability of children.

The analysis revealed that there was a significant association of pre test level of awareness was found with demographic variables such as year of the experience, residential distance from school where as there was no significant

association found with remaining variable (age, gender, formal training, frequency of in-service education, marital status, type of school, and income per month) at 0.05 level. Related to coping ability there was no significant association of pre test level of coping ability was found with demographic variables such as age, gender, formal training, year of experience, frequency of in-service education, marital status, type of school, income per month, and residential distance at 0.05 levels. The calculated correlation value between the awareness and coping ability regarding learning disability of children among primary school teacher was r = 0.8. It indicated positive and highly significant. All above analysis proved that given IEC package was very effective among primary school teachers.

CONCLUSION

The results of the study concluded that IEC package was effective in providing awareness and coping ability regarding learning disability of children. Therefore the investigator felt that the reduction in learning disability among children can be achieved by early identification and a well organized, concise, flexible, programme on learning disability of children. An established plan, especially training the teachers how to handle those children's with learning disability, can make significant change in the outcome of such commonly occurring disability among children.

NURSING IMPLICATION

The findings of the study which enable us to conclude that IEC package is effective on improving awareness and coping ability related to learning disability of children among primary school teacher have implications to the nursing profession, including nursing practice, nursing education, nursing administration and nursing research

NURSING PRACTICE

- Nurses play an important role in identifying the health problems in children; they participate in nursing activities at all three levels like primary, secondary and tertiary.
- More number of nurses should be encouraged to work as school health nurses or they can participate in school health programmes to achieve the health related goals of our nation.
- The deficit in the awareness of primary school teachers towards learning disabilities indicates that orientation programmes by the nurses would benefit the teacher population for early identification of learning disabilities and for providing remedial help to the children.
- In nursing practice point of view, the extended and expanded role of nurses being the trend, the school mental health nurse and community mental health nurses can assume role as health educators in promotion of child mental health.
- A liaison with the primary school teachers helps them design better programmes to intervene learning disabilities in children.
- This reduces the cost of care as well as the service being provided at the sight of the problem. This also improves the image of nurse in the public service

NURSING EDUCATION

- The nursing education is framed such a way that it equips the nurses with the essential knowledge, skill and attitude for meeting the needs of the society at primary, secondary and tertiary levels.

- Childhood development disorders are studied with due importance in the fields such as psychiatric nursing, community health nursing and pediatric nursing

- The nursing curriculum should also prepare nurses to identify the problems that are occurring in school children, therefore early identification could help in early intervening of the problems.

NURSING ADMINISTRATION

Nursing Administration should make necessary initiatives to:

- Collaborate with governing bodies to formulate standard policies and protocols to emphasize on learning disability related to awareness and coping ability for primary school teachers.

- Conduct in-service programme and continuing education programme on learning disability related to awareness and coping ability for primary school teachers.

- Arrange and conduct workshops, conferences, seminars on learning disability related to awareness and coping ability for primary school teachers.

- Provide opportunities for psychiatric nurse to participate in learning disability related to awareness and coping ability training programme.

NURSING RESEARCH

Nurse Researchers can:

- Promote more research on learning disability related to awareness and coping ability for primary school teachers.

- Disseminate the findings of the research through conferences, seminars and publishing in nursing journals.
- Promote effective utilization of research findings in providing awareness and coping ability regarding learning disability among primary school teachers.

RECOMMENDATIONS

The following recommendations are done based on this study:

- The similar study can be conducted with large samples for better generalization.
- A comparative study can be conducted to assess the awareness and coping ability regarding learning disability among parents and primary school teachers.
- A study can be conducted to assess the awareness and practice on psychiatry nurses with regard to the preventive measures for learning disability.
- A study can be conducted to assess the effectiveness of conducting learning disability management programme among primary school teachers.
- A similar study can be conducted in a retrospective approach.

LIMITATIONS

- Only limited literatures and studies are obtained from the Indian context.
- Due to time constraints, the investigator was unable to take larger samples for the study.

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ANNEXURES

LIST OF EXPERTS

1. **Prof. Mrs. VANITHA INNOCENT RANI, M.Sc., (N), PhD,**

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2. **Prof .MRS. ARULSELVI, M.Sc (N), PhD.**
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3. **Prof. KUSMA, MSc (N), PhD.**
   WARD INCHARGE,
   NIMHANS HOSPITAL,
   BANGALORE**.**

4. **Prof. SHANTHI, MSc (N), PhD.**
   WARD INCHARGE,
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5. **Prof .MR. RAMREDDY, M.Sc (N).,**
   SENIOR NURSING TUTOR,
   NIMHANS HOSPITAL,
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6. **Prof. MR. SHANKARAIYA, M.Sc (N).,**
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7. **DR. ELANGOVAN, MD (Psy).,**
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8. **DR.BABUBALASINGH, MD (PSY**).,
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   THANJAVUR MEDICAL COLLEGE HOSPITAL,
   THANJAVUR.

9. **DR. DHARMALINGAM, PhD.**
   STATISTICIAN,
   PONDICHERRY.

TOOL –I

SELF ADMINISTERED QUESTIONAIRES TO ELICIT THE DEMOGRAPHIC VARIABLES

SAMPLE NO:

Instruction: Please read every item carefully and put tick mark (√)

1. Age of the teacher
   a) 21 -25 Years b) 26- 30 Years c) >30 Years
2. Gender of the teacher
   a) Male b) Female
3. Formal training in teaching
   a) D.T.Ed b) B.Ed c) any other degree
4. Years of the teaching experience
   a) <5 years b) 6- 10 years c) 11- 15 years d) >15 years
5. Frequency of in-service training
   a) One time b) Two times c) 3 times d) None
6. Marital status
   a) Married b) Single c) Divorced d) Separated
7. Type of school
   a) Private b) Govt c) Govt Aided d) Matriculation
8. Income per month
   a) Less than Rs.10,000 b) Rs.10,000- 15,000 c) More than Rs.15,000
9. Residency Distance from school
   a) Walk able distance b) one hour travel c) more than one hour travel

TOOL-II

AWARENESS RELATED QUESTIONAIRES

Instruction: Please read every item carefully and put tick mark (√)

S.NO	CONTENT
1.	Learning disability means…… a) Mental retardation b) Academic underachievement in a child with normal IQ c) Academic underachievement in a child with low IQ
2.	Learning disability is…….. a) Equally present among both boys and girls b) More common in girls c) More common among boys
3.	The risk factors of Learning disability include…… a) Perinatal? injuries b) Genetic and hereditary factors c) Both a and b
4.	The causes of Learning disability include…… a) Neurological impairment b) Abnormal sense organs c) Poor academic teaching
5.	Learning disability may result due to the following Except …….. a) Premature birth b) Emotional disturbance c) Medical problems soon after birth
6.	Learning disability is commonly called a…….. a) Dyslexia b) Dysgraphia

	c) Dysphasia
7.	The most common type of Learning disability is…….. a) Writing disability b) Mathematics disability c) Reading disability
8.	Reading disability means…….. a) Habitual carelessness in reading b) Reading achievement below the expected level for the child's age and education c) Lack of interest in reading
9.	Children with Reading disability are identified usually by the age of…… a) 7years b) 9years c) 11years
10.	Reading disability syndrome include all except…… a) Speech and language deficit b) Impaired visual acuity c) Right-left confusion
11.	Children with Reading disability …….. a) Have trouble in word recognition and sounding out words b) Have inability to pronounce letters and words c) Are unaware of letters and words
12.	Early warning signs of Learning disability include…… a). Reversals in writing and reading b). Slowness in completing the work c). All of the above
13.	Learning disability will be suspected in a child……. a) Who is always aggressive b) Who tries to avoid social interaction c) Who is always very active

14.	Children with Learning disability make mistakes while copying from blackboard because…… a) They are careless in copying b) They have vision impairment c) They have trouble in making sense of visual details
15.	The Children with Learning disability will …… a) Drop pencil/books frequently b) Misplace pencil/books frequently c) Lose pencil/books frequently
16.	Children with Learning disability try to avoid social interaction because……. a) They are afraid of group work b) They have low self-esteem c) They feel isolated from the group
17.	Children with Learning disability usually……. a) Sit straightly b) Slump in desk c) Sleeps on the desk
18.	In group activities, the children with Learning disability appear……... a) Extremely free b) Extremely involved c) Extremely shy
19.	Children with Learning disability often have…….. a) Lack of hand preference b) Left handedness c) Right handedness
20.	The common reading errors made by the children with Reading disability is…… a) Stuttering and stammering b) Incomprehensible reading c) Omissions, additions, and distortions

TOOL-III

III.COPING ABILITY RELATED QUESTIONAIRES

Instruction: Please read every item carefully and put tick mark (√).

S. NO	CONTENT

1.	The most important strategy in managing a child with learning disability is to ……. a) Follow a strict work schedule b) Encourage their interest c) Have high expectation &demands
2.	A child with learning disability should be encouraged …….. a) To get good grades b) To compete with self c) To compare self with other
3.	To manage learning disability, it is essential …… a) To remind the student of their disability often b) To restore the students self esteem & confidence c) To relieve the child from all the responsibilities
4.	In a child with learning disability, the teacher should ……. a) Break the tasks into smaller steps. b) Appreciate achievement of task c) All of the above.
5.	The best teaching approach for child with mathematics disability may be……. a) Encouraging memorization of concepts b) Using flash cards & work book c) Encouraging to study independently
6.	The remedial programme for learning disability is best implemented through……. a). Group approach b). Special school approach c). Individual approach
7.	A child suspected of learning disability may be referred to…… a) Psychologist b) Pharmacologist c) Physiotherapist

8.	A child with learning disability should be……. a) Sent to a special school b) Allowed to continue schooling with special coaching c) To compare self with other
9.	Success for the student with learning disability requires a focus on……. a) Group learning b) Project c) Individual achievement
10.	Children should be taught the basis about books, that can read……... a) From left to right & top to bottom b) From right to left &bottom to top c) Easy to hard
11.	Children with learning disability need a special help in learning to develop phonological awareness; which means……. a) Attention to the sound b) Attention to the language c) Attention to the meaning of language
12.	In teaching a phonemic awareness, the focus of all activities should be on……. a) Sound of letter b) Sound of words c) Sound of sentence
13..	A child with learning disability should be encouraged to use the spelling knowledge & strategies regularly……. a) From their writing b) From book reading c) From black board

14.	The teacher role for the child with learning disability who have failed to achieve his / her goal is…….. a) To give punishment b) To give warning c) To give positive reinforcement for moving forward
15.	The teacher can maximize the effectiveness of homework if they……. a) Communicate to the parents b) Discuss with peer group c) Discuss with the administrator
16.	If the teacher assigned homework for the student with learning disability, it may result in a greater acquisition of…… a) Dependent study skills b) Independent study skills c) Group study skills
17.	If the teacher assigned homework for the student with learning disability, they assign the activities based on……. a) Family situation b) Parent education c) Age of the student
18.	The teacher play vital role in…….. a) Selection of homework & assignment b) Correcting the homework c) Grading the student
19.	A teacher should allow the students to write the number in……. a) 2 line note b) Boxes type of note c) 4 line note
20.	The teacher should be aware of the need to assess & remediate the non verbal language before the child is……

	a) 5 yrs old b) 10 yrs old c) 8 yrs old

TOOL – II SCORING KEYS

Question No	Correct Response	Score
1	**B**	1
2	**C**	1
3	**C**	1
4	**A**	1
5	**B**	1
6	**A**	1
7	**C**	1
8	**B**	1
9	**A**	1
10	**C**	1
11	**A**	1
12	**C**	1
13	**B**	1
14	**C**	1
15	**A**	1
16	**B**	1
17	**B**	1
18	**C**	1
19	**A**	1
20	**C**	1

SCORING:

Each correct answer carrying a score of 1 and

Each incorrect answer carrying a score of 0

LEVEL OF AWARENESS	PERCENTAGE (%)
Inadequate	**< or = 50%**
Moderately adequate	**51- 75%**
Adequate	**>75 %**

TOOL – III SCORING KEYS

Question No	Correct Response	Score
1	**B**	1
2	**A**	1
3	**B**	1
4	**C**	1
5	**B**	1
6	**C**	1
7	**A**	1
8	**B**	1
9	**C**	1
10	**A**	1
11	**C**	1
12	**B**	1
13	**A**	1
14	**C**	1
15	**A**	1
16	**b**	1
17	**c**	1
18	**a**	1
19	**b**	1
20	**b**	1

SCORING:

Each correct answer carrying a score of 1 and

Each incorrect answer carrying a score of 0

LEVEL OF COPING ABILITY	PERCENTAGE (%)
Inadequate	**< or = 50%**
Moderately adequate	**51- 75%**
Adequate	**>75 %**

S. No	Time	Specific Objectives	Content	AV aids	Researcher's Activity	Learner Activity	Evaluation
			LEARNING DISABILITY				
	5 mts	Introduce about learning disability	**Introduction:** Learning disabilities or learning disorder is an umbrella term for a wide variety of learning disability. A learning disability is not a problem with intelligence or motivation. Kids with learning disabilities aren't lazy or dumb. In fact most are just as smart as everyone else. Their brains are simply wired differently. This difference affects how they receive and process information.	**L** **C**	Introduction	Active listening	
1.	3 mts	define the learning disability	**Definition**: Children and adult with learning disabilities see, hear, and understand things differently. This can lead to trouble with learning new information skills, putting them to use. • **A learning disability is a condition that produces a gap between someone's ability and his or her performance.**	**D**	defining	Listening	Define the learning disability?

2.	2 mts	discrete the incidence of LD	**Incidence :** • In India the **incidence** of **learning disabilities** has increased by more than **300%** in the **last 30 years** • In India the Prevalence rate of learning disability is 3 % to 10 % of school age population • Prevalence of **reading disability** is conservatively estimated to range between **4% and 10%** in the general, school-aged population, although rates as **high as 17%** have been reported. • Prevalence of **mathematics disability** alone is estimated at approximately **1 in 5 children** with a learning disability, with an estimated prevalence of **1%** in the general **school-age** population. • The prevalence of **writing disability** approximately **6%** of school-aged children • The majority of schoolchildren who receive special education services have deficits in reading, and dyslexia is the most common cause. • Differences by **'Gender'** shows that, **boys are more** likely than girls to be identified as having a **learning disability.**	**L** **C** **D**	Explaining	Listening	

3.
 	
4.
	3 mts
	
	7 mts
		enlist the causes for LD
		
		Classify the LD
			Causes or Presumed causes of Learning Disabilities:
			• NO real causes
			• Might be caused by:
			  • Hereditary
			  • Teratogenic
			  • Medical
			  • Environmental
			
			Types:
			The most common types of learning disabilities involve problem with reading, writing, math, reasoning, listening, and speaking.
			1. Learning disabilities in reading (dyslexia)
			signs of reading difficulty including problems with;
			• Letter and word recognition
			• Understanding words and ideas
			• Reading speed and fluency
			• General vocabulary skill
			2. Learning disabilities in maths (dyscalculia)
			• Problem in doing maths problem
				L
				
				C
				
				D
					Explaining	Taking notes	What is the cause for LD?

			• Struggle with memorization and organization of number, operation sign and number ‘’facts’’. • Understanding time, using money **3. Learning disabilities in writing (dysgraphia)** Symptoms of a writing language learning disability revolve around the act of writing. They include problem with; • neatness and consistency of writing • accurately copying letter and words • spelling consistency • writing organization and coherence **4. other types :** • **learning disabilities in motor skills (dyspraxia)** Motor difficulty refers to problem with movement and coordination whether it is fine motor skills (cutting, writing) or gross motor skills (running, jumping). • **Learning disabilities in language (aphasia\ dysphasia**) Language and communication LD involves the ability to understand or produce spoken language. • **Auditory processing disorder** Difficulty hearing difference between sounds.	**F** **L** **A** **S** **H** **C** **A** **R** **D** **S**	Classifying	Listening	What is dyslexia?

			Problem with reading, comprehension, language. • **Visual processing disorder** Difficulty interpreting visual information. Problem with reading, maths, maps, charts, symbols, picture. **5. Other disorder make learning difficult** • **ADHD (Attention deficit hyperactivity disorder)** Children with ADHD often have problems, staying focused, following instruction, stay organized, and completing homework. • **Autism** Children with autism spectrum disorder may have trouble in communicating, reading body language, learning basic skills, making friends, and making eye contact. **Patho physiology;** In normal learning conditions, the brain has the ability to reorganize itself by forming new neural connections. These new connection facilities skills like reading and writing that were difficult using the old connection. Science has made great strides in understanding the inner working of the brain,	**F L A S H** **C A R D S**			

5.	3 mts	describe the path physiology of LD	and one important discovery that bring new hope for learning disabilities and disorder is called neuroplasticity. Neuroplasticity refers to the brain's natural, lifelong ability to change. Throughout life, the brain is able to form new connection and generate new brain cells in response to experience and learning. **Preschool sign and symptom of learning disabilities** • Problem pronouncing words • Trouble finding the right word , Difficulty rhyming • Trouble learning the alphabet, number, colors, shapes, days of the week • Difficulty following direction or learning routines • Difficulty controlling crayons, pencils, and scissors or coloring within the lines. • Trouble with buttons, zippers, snaps, learning to tie shoes. **Diagnosis and testing for LD** : Diagnosing a learning disability is a process. It involves testing, history taking & observation by a trained specialist. Finding a reputable referral is important.	**L** **C** **D**	Describing	Listening	What is neuroplasticity?

6.	5 mts	enumerate the sign and symptom of LD	Types of specialist who may be able to test and diagnose LD include; • Clinical psychologist • School psychologist • Child psychiatrist • Educational psychologist • Developmental psychologist • Neuropsychologist • Occupational therapist • Speech and language therapist **Treatment**: • <u>Learn the specific type of your child's learning disability</u>; read and learn about your child's type of learning disability. • <u>Research treatments, services, and new theories</u>; this can help you advocate for child at school and pursue treatment at home. • <u>Pursue treatment and services at home</u>; Pursue these options at home or with a therapist or tutor. • <u>Nurture your child's strengths ;</u>	**F** **L** **A** **S** **H** **C** **A** **R** **D** **S**	explaining	Listening	What are all the sign & symptom occur in preschooler?
7.	3 mts	discuss about diagnosis and testing of LD		**L** **C** **D**	Discussion	Active listening	Who all are eligible to Examine child with LD?

8.	5 mts	brief about the treatment of LD	Pay attention to child's interest and passions.
			• <u>Emphasize healthy lifestyle habits;</u>
			  • Exercise - is antidote to stress and frustration. Encourage child with LD to get outside move and play.
			  • Protein rich Diet - full of whole grains, fruits, vegetables, and lean protein will help to boost mental focus.
			  • Sleep- kids need more sleep than adult. Preschooler need 11 to 13 hours per night, middle school children need 10 to 11 hrs, teens and preteens need from 8 **1/2** to 10hrs
			
			Successful Strategies for Teaching Students with Learning Disabilities
			
			Lee Swanson (1999) and his colleagues found two major intervention practices that produced large outcomes. One is direct instruction. The other is learning strategy instruction.
				L
				
				C
				
				D
					Explaining	Listening	How to treat the child with LD?

9.	15 mts	magnify the successful strategies for	Teachers those applied these kinds of intervention: a. Break learning into small steps b. Administered probes c. Supplied regular quality feedback d. Used diagrams, graphics and pictures to augment what they were saying in words e. Provided ample independent, well-designed, intensive practice f. Modeled instructional practices that they wanted students to follow g. Provided prompts of strategies to use; and h. Engaged students in process type questions like “How is that strategy working? Where else might you apply				

		teaching student with LD	it?” Success for the student with learning disabilities requires a focus on individual achievement, individual progress, and individual learning. This requires specific, directed, individualized, intensive remedial instruction of students who are struggling. **Reading Instruction: Tips for Teachers** Create Appreciation of the Written Word • Share stories with children and invite them to explore a story's magic. • Share informational texts and invite children to wonder about the new ideas presented. • Take every opportunity to point out the ways in which reading is essential to the communications of everyday	**L** **C** **D**	Lecture cum discussion	Listening	What is called phonological awareness?

			life (e.g., on labels, instructions, and signs). Develop Awareness of Printed Language and the Writing System • Make sure students know how books are organized. They should be taught the basics about books--that they are read from left to right and top to bottom, that print may be accompanied by pictures or graphics, that the pages are numbered, and that the purpose of reading is to gain meaning from the text and understand ideas that words convey. • Read out to children from books with easy-to-read large print. Use stories that have predictable words in the text. • Use "big books" to help children notice and learn to recognize words that occur frequently, such as a, the,	**L** **C** **D**			

			is, was, and you. • Label objects in your classroom. Teach the Alphabet • A strong predictor of the ease with which a child learns to read is his or her familiarity with letters of the alphabet. This familiarity is a critical building block for learning to read. • It is important to go beyond knowing the names of letters. Students must also develop a sense of the purpose of letters. • Help them notice the letters in the print that surrounds them and that you share with them every day. • Engage the students in activities that will help them learn to recognize letters visually.	**L** **C** **D**			

			• Help students learn to form the letters and encourage them to embellish their work with their names and with other first attempts at writing. Develop the Students' Phonological Awareness • In listening and speaking, we pay attention to the meaning of language rather than to its sound. To learn to read, however, students must be taught to attend to the sounds, or phonology, of language. This is necessary for them to understand how speech is represented by print. Children with learning disabilities need special help in learning to develop such phonological awareness. • Model and demonstrate how to break short sentences into individual words. For example, use the sentence "Frogs eat bugs," and demonstrate with chips, cards, or other manipulative how the sentence is made up of	**L** **C** **D**			

			three words and how the order of the words matters. Using manipulative to make sentences play with each word and put it in order. • Develop students' awareness of the sounds of individual words by asking them to clap out syllables and to listen for and generate rhymes. • Once children are comfortable in playing games with words, syllables, and rhymes, move onto phonemic awareness. Develop Phonemic Awareness • Phonemic awareness refers to an understanding that words and syllables are comprised of a sequence of elementary speech sounds. This understanding is essential to learn and to read an alphabetic language. The majority of children with reading disabilities fail to grasp this idea.	**L** **C** **D**			

			• In teaching phonemic awareness, the focus of all activities should be on the sounds of words, not on letters or spellings Teach the Relation of Sounds and Letters • Students should learn the letters of the alphabet and discriminate each letter from the other, because each stands for one or more of the sounds that occur in spoken words. • When presenting each letter, model its corresponding sound and have children produce the sound themselves. For children with learning disabilities, the teaching activities must be explicit and unambiguous. Teach Children How to Sound Out Words • After students have mastered a few letter-sound correspondences, teach them to decode words or sound	**L** **C** **D**			

			them out. Begin with small, familiar words. • Teach the children to sound out the letters, left to right, and blend them together, searching for the word in memory. • Model sounding out the word, blending the sounds together and saying the word. The ability to sound out new words allows children to identify and learn new words on their own. • Give children stories containing words that reflect the letter-sound patterns. Teach Children to Spell Words • Teach children to spell words by sounding their letters one by one. • Begin with short words children can sound out,	**L** **C** **D**			

			because these words follow regular spelling conventions, e.g., cap, bat, and sit instead of cape, bait or sight. • Begin with simple words that do not contain consonant blends, e.g., ham and pan instead of slam and plan. • Encourage students to use spelling knowledge and strategies regularly in their own writing. Help Children Develop Fluent, Reflective Reading • Help children learn to read fluently by requiring them to read new stories and reread old stories every day. • Help children extend their experience with the words, language, and ideas in books by interactively reading harder texts with them and to them every day. • Relate information in books to other events of interest to children, such as holidays, pets, siblings, and games.	**L** **C** **D**			

10.	10 mts	explain about successful home work strategies for teacher	• Point out how titles and headings tell what a book is about. **Successful Homework Strategies For Teachers** Teachers play a vital role in the selection, assignment, and use of homework. Research indicates that where homework assignments are meaningful and relevant, student achievement increases. Teachers will maximize the effectiveness of homework if they will: • Communicate to parents in the first meeting or correspondence of the year appropriate areas in which parental involvement can help reinforce their children's learning rates, performance, and confidence. Include suggestions to parents on how to provide homework assistance. • Compare the amount of time the students required to complete homework assignments with an anticipated completion time, and modify assignments as needed.	**L** **C** **D**	Lecture cum discussion	Listening	How to improve teachers coping ability?

			• Learn student feelings about homework assignments by having them circle smiling, frowning or neutral faces on the corner of homework papers to indicate their feelings too easy, too difficult, or just right. Then modify assignments as needed. • Plan with other teachers at your school in terms of length and frequency of homework assignments, adoption of similar homework practices, such as a standard style for headings. • Assign activities such as age-appropriate games (made in class) or other activities that will be fun. • Assign activities which are relevant to the child outside of the classroom. Assign homework that enriches, reinforces, or supplements classroom instruction. • Randomly reward homework completion "Everyone finished their assignments last week, so you may have five minutes extra recess today." • Use a homework planner. Just as adults use calendars or other aids to schedule activities, students can benefit from structured notes. They can be taught to enter	**L** **C** **D**			

			assignments, note due dates, and indicate completion. The planner can also be used to communicate with parents by asking parents to sign when homework is completed and to pass notes between school and home (and vice versa). • Communicate with parents regarding the amount of homework you plan to assign, and approximate time required for completion. If there is a discrepancy between the child's performance and teacher expectations, treat this as diagnostic information. • Suggest activities that parents can do with their children and enhance learning. • Review homework promptly and provide students with feedback and additional instruction as appropriate. • Explain the purpose of homework assignments and ensure that the assignment is understood. • Teach study skills such as note taking, strategies to increase reading comprehension, and use of mnemonic memory devices. A number of study skills programs are commercially available. • Homework assigned to students with disabilities may	**L** **C** **D**			

			result in greater acquisition of Independent study skills and increase time spent on academic tasks. **Summary** Sofar we have discussed about learning disability, its causes, pathophysiology, signs & symptoms, diagnosis and testing, treatment aspects and how to primary school teacher can improve their coping ability when they deal with children with LD in primary school. **Conclusion** Through this class, the teachers are refresh their knowledge about LD, and also their coping ability also improved when they handle children with LD, at the same time their attitude and practical skills are also developed.				

STRUCTURED TEACHING PLAN

ON

LEARNING DISABILITY

LESSON PLAN

Name of the Subject	:	Mental Health and Psychiatric Nursing
Name of the Topic	:	Learning Disability
Venue	:	Primary schools at Thanjavur .
Date	:	
Duration	:	45 Mts
Group	:	Primary school teachers
Method of Teaching	:	Lecture cum Discussion
AV Aids Used	:	LCD, flash cards
Name of the Researcher	:	Mrs. P. Sivasankari, II Yr, M.Sc (N), OLH CON, Thanjavur.
Name of the Research Guide	:	Ms. Saranya, M.Sc (N), HOD of MHN Dept, OLH CON, Thanjavur

General Objective:

The primary school teachers will acquire knowledge about learning disability that would develop practical skills in handling children with LD and to have a positive attitude and also improve the coping skills of the primary school teacher while handling children with LD.

Specific Objectives:

The primary school teacher will be able to,

- define the learning disability
- discrete the incidence of LD
- enlist the causes for LD
- classify the LD
- describe the pathophysiology of LD
- enumerate the signs and symptoms of LD
- discuss about diagnosis and testing of LD
- brief about the treatment of LD
- magnify the successful strategies for teaching student with LD
- explain about successful home work strategies for teacher

CHAPTER – I

INTRODUCTION

CHAPTER – II

REVIEW OF LITERATURE

CHAPTER – III

RESEARCH

METHODOLOGY

CHAPTER – IV

DATA ANALYSIS

CHAPTER – V

DISCUSSION

CHAPTER – VI

SUMMARY &

CONCLUSION

REFERENCES


Thank
you!